



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1001\_E-1

Component : mi-Lysis Buffer

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

Endocrine disrupting properties

Poly(oxyethylene) nonylphenyl ether (environment – Regulation (EC) No 1907/2006 Article 57(f))

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	0.24	77-86-1	201-064-4	-
Poly(oxyethylene) nonylphenyl ether	0.1	9016-45-9	500-024-6	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 [SCL's, M-Factors, ATE, Component notes] M = 1; M = 10

## RIP-Assay Kit for microRNA

Disodium dihydrogen ethylenediaminetetraacetate	0.37	6381-92-6	-	-
Sodium chloride	0.88	7647-14-5	231-598-3	-
Water	95.00<	7732-18-5	231-791-2	-

## Components contributing to the hazard

Endocrine disrupting properties (Article 57(f) – environment) in REACH SVHC candidate list

Poly(oxyethylene) nonylphenyl ether

## Section 4. First-aid measures

## 4.1 Descriptions of first-aid measures

## General measures

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## RIP-Assay Kit for microRNA

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260-Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280-Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

## Advice on general occupational hygiene

P264-Wash contaminated parts thoroughly after handling.

P270-Do not eat, drink or smoke when using this product.

## 7.2 Storage

## Conditions for safe storage

P233-Keep container tightly closed.

P235 + P410-Keep cool. Protect from sunlight.

P401-Store in accordance with local/national regulation.

## Container and packaging materials for safe handling

P234-Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

## Occupational Exposure Limit

## ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

## Derived No-Effect Level (DNEL)

No DNELs available.

## Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

## Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

## Individual protection measures

## Hand protection

Wear protective gloves.

## Eye protection

Wear eye/face protection.

## Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

## RIP-Assay Kit for microRNA

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: 8.16

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

### 10.1 Reactivity

Reactivity data is not available.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

### 10.4 Conditions to avoid

Conditions to avoid data is not available.

### 10.5 Incompatible materials

Incompatible materials data is not available.

### 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

## RIP-Assay Kit for microRNA

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

## 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

## Aquatic toxicity

Hazardous to the aquatic environment, short-term (acute)

[Table 3 of Annex VI to the CLP Regulations]

(Poly(oxyethylene) nonylphenyl ether)

Category 1

Hazardous to the aquatic environment, long-term (chronic)

[Table 3 of Annex VI to the CLP Regulations]

(Poly(oxyethylene) nonylphenyl ether)

Category 1

## 12.2 Persistence and degradability

(Poly(oxyethylene) nonylphenyl ether)

Not rapidly degradable (Degradation rate: 0% (by BOD)) (source: NITE)

## 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

[Data for components of the product]

Endocrine disrupting properties (Article 57(f) – environment) in REACH SVHC candidate list

Poly(oxyethylene) nonylphenyl ether

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

## RIP–Assay Kit for microRNA

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Noxious Liquid Substances ; Cat. Z equiv.

Sodium chloride

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

List of substances subject to authorisation (REACH, Annex XIV)/SVHC – candidate list

Endocrine disrupting properties (Article 57(f) – environment)

Poly(oxyethylene) nonylphenyl ether

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

1,3-Propanediol, 2-amino-2-(hydroxymethyl)-; Sodium chloride; Water; Poly(oxyethylene) nonylphenyl ether

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

Full text of Hazard categories and Hazard statements referred to only section 3

Aquatic Acute 1, H400 – Hazardous to the aquatic environment, short-term (acute), Category

1: H400 Very toxic to aquatic life

Aquatic Chronic 1, H410 – Hazardous to the aquatic environment, long-term (chronic),

Category 1: H410 Very toxic to aquatic life with long lasting effects

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

Revision information

First edition

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1002\_E-1

Component: mi-Wash Buffer

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

Endocrine disrupting properties

Poly(oxyethylene) nonylphenyl ether (environment – Regulation (EC) No 1907/2006 Article 57(f))

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	0.24	77-86-1	201-064-4	-
Sodium chloride	0.88	7647-14-5	231-598-3	-
Poly(oxyethylene) nonylphenyl ether	0.10	9016-45-9	500-024-6	Aquatic Acute 1, H400; Aquatic Chronic 1, H410 [SCL's, M-Factors, ATE, Component notes]

## RIP-Assay Kit for microRNA

				M = 1;M = 10
Disodium dihydrogen ethylenediaminetetraacetate	0.37	6381-92-6	-	-
Water	95.00<	7732-18-5	231-791-2	-

## Components contributing to the hazard

Endocrine disrupting properties (Article 57(f) – environment) in REACH SVHC candidate list

Poly(oxyethylene) nonylphenyl ether

## Section 4. First-aid measures

## 4.1 Descriptions of first-aid measures

## General measures

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

#### Preventive measures

(Exposure Control for handling personnel)

P260–Do not breathe dust/fume/gas/mist/vapors/spray.

#### Safety Measures

P280–Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

#### Advice on general occupational hygiene

P264–Wash contaminated parts thoroughly after handling.

P270–Do not eat, drink or smoke when using this product.

### 7.2 Storage

#### Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

#### Container and packaging materials for safe handling

P234–Keep only in original packaging.

### 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limit

##### ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

#### Derived No-Effect Level (DNEL)

No DNELs available.

#### Predicted No-Effect Concentrations (PNEC)

No PNECs available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

#### Individual protection measures

##### Hand protection

Wear protective gloves.

##### Eye protection

Wear eye/face protection.

##### Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

## RIP-Assay Kit for microRNA

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: 8.16

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

### 10.1 Reactivity

Reactivity data is not available.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

### 10.4 Conditions to avoid

Conditions to avoid data is not available.

### 10.5 Incompatible materials

Incompatible materials data is not available.

### 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

## RIP-Assay Kit for microRNA

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

## 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

## Aquatic toxicity

Hazardous to the aquatic environment, short-term (acute)

[Table 3 of Annex VI to the CLP Regulations]

(Poly(oxyethylene) nonylphenyl ether)

Category 1

Hazardous to the aquatic environment, long-term (chronic)

[Table 3 of Annex VI to the CLP Regulations]

(Poly(oxyethylene) nonylphenyl ether)

Category 1

## 12.2 Persistence and degradability

(Poly(oxyethylene) nonylphenyl ether)

Not rapidly degradable (Degradation rate: 0% (by BOD)) (source: NITE)

## 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

[Data for components of the product]

Endocrine disrupting properties (Article 57(f) – environment) in REACH SVHC candidate list

Poly(oxyethylene) nonylphenyl ether

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

## RIP–Assay Kit for microRNA

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Noxious Liquid Substances ; Cat. Z equiv.

Sodium chloride

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

List of substances subject to authorisation (REACH, Annex XIV)/SVHC – candidate list

Endocrine disrupting properties (Article 57(f) – environment)

Poly(oxyethylene) nonylphenyl ether

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

1,3-Propanediol, 2-amino-2-(hydroxymethyl)-; Sodium chloride; Water; Poly(oxyethylene) nonylphenyl ether

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

Full text of Hazard categories and Hazard statements referred to only section 3

Aquatic Acute 1, H400 – Hazardous to the aquatic environment, short-term (acute), Category

1: H400 Very toxic to aquatic life

Aquatic Chronic 1, H410 – Hazardous to the aquatic environment, long-term (chronic),

Category 1: H410 Very toxic to aquatic life with long lasting effects

#### References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

#### Revision information

First edition

#### General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



RIP-Assay Kit for microRNA

Issue date: 11/Jun/2025

## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1003\_E-1

Component: High-Salt Solution

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical &amp; Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Sodium azide	0.09	26628-22-8	247-852-1	Acute Tox. 2 *, H300; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH032
Water	95.00<	7732-18-5	231-791-2	-

#### Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

### Section 4. First-aid measures

## RIP–Assay Kit for microRNA

## 4.1 Descriptions of first-aid measures

## General measures

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260–Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## RIP–Assay Kit for microRNA

Any incompatibilities data is not available.

Advice on general occupational hygiene

P264–Wash contaminated parts thoroughly after handling.

P270–Do not eat, drink or smoke when using this product.

## 7.2 Storage

Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

Container and packaging materials for safe handling

P234–Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section

7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

ACGIH

(Sodium azide)

Ceiling: 0.29mg/m<sup>3</sup>(as Sodium azide); Ceiling: 0.11ppm(as Hydrazoic acid vapor) (Card impair; lung dam)

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

(Sodium azide)

LTEL: 0.1mg/m<sup>3</sup>

STEL: 0.3mg/m<sup>3</sup> (SKIN)

Derived No–Effect Level (DNEL)

No DNELs available.

Predicted No–Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

## RIP-Assay Kit for microRNA

Flammability (gases, liquids and solids) data is not available.  
Lower and upper explosion limit/flammability limit data is not available.  
Flash point data is not available.  
Auto-ignition temperature data is not available.  
Decomposition temperature data is not available.  
pH data is not available.  
Kinematic viscosity data is not available.  
Solubility:  
    Solubility in water data is not available.  
    Solubility in solvent data is not available.  
n-Octanol/water partition coefficient data is not available.  
Vapor pressure data is not available.  
Density and/or relative density data is not available.  
Relative vapor density (Air=1) data is not available.  
Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

## 10.1 Reactivity

Reactivity data is not available.

## 10.2 Chemical stability

Stable under normal storage/handling conditions.

## 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

## 10.4 Conditions to avoid

Conditions to avoid data is not available.

## 10.5 Incompatible materials

Incompatible materials data is not available.

## 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

## 11.1 Information on toxicological effects

## Acute toxicity

Acute toxicity (Oral)

[Table 3 of Annex VI to the CLP Regulations]

(Sodium azide)

Category 2

## Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

## Carcinogenicity

[ACGIH]

(Sodium azide)

A4: Not Classifiable as a Human Carcinogen

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

## RIP-Assay Kit for microRNA

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

## 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

## Aquatic toxicity

Hazardous to the aquatic environment, short-term (acute)

[Table 3 of Annex VI to the CLP Regulations]

(Sodium azide)

Category 1

Hazardous to the aquatic environment, long-term (chronic)

[Table 3 of Annex VI to the CLP Regulations]

(Sodium azide)

Category 1

## Water solubility

(Sodium azide)

41.7 g/100 mL (17°C) (source: ICSC, 2014)

## 12.2 Persistence and degradability

(Sodium azide)

Not rapidly degradable (Degradation rate: 1% (by HPLC)) (source: NITE)

## 12.3 Bioaccumulative potential

(Sodium azide)

log Pow: < 0.3 (source: NITE)

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273-Avoid release to the environment.

P501-Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

## RIP-Assay Kit for microRNA

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

IATA (Dangerous Goods Regulations)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Water; Sodium azide

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

Full text of Hazard categories and Hazard statements referred to only section 3

Acute Tox. 2, H300 – Acute toxicity, Category 2: H300 Fatal if swallowed

Aquatic Acute 1, H400 – Hazardous to the aquatic environment, short-term (acute), Category

1: H400 Very toxic to aquatic life

Aquatic Chronic 1, H410 – Hazardous to the aquatic environment, long-term (chronic),

Category 1: H410 Very toxic to aquatic life with long lasting effects  
EUH032 – Contact with acids liberates very toxic gas.

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN  
Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN  
IMDG Code, 2024 Edition (Incorporating Amendment 42–24)  
IATA Dangerous Goods Regulations (66th Edition) 2025  
2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2025 TLVs and BEIs. (ACGIH)  
Supplier's data/information  
Hazard Communication Standard – 2012 (29 CFR 1910.1200)  
Chemicals safety data management system "GHS Assistant" Version 4.33  
(<https://www.asahi-ghs.com/>)

Abbreviations and acronyms

card – cardiac; dam – damage; impair – impairment

Revision information

First edition

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



RIP-Assay Kit for microRNA

Issue date: 11/Jun/2025

## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1004\_E-1

Component: High-Salt Solution

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical &amp; Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

GHS classification and label elements of the product

#### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

#### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

#### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

Mixture/Substance selection:

#### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Sodium chloride	29.22	7647-14-5	231-598-3	-
Water	70.00<	7732-18-5	231-791-2	-

Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

### Section 4. First-aid measures

#### 4.1 Descriptions of first-aid measures

General measures

P314-Get medical advice/attention if you feel unwell.

## RIP-Assay Kit for microRNA

## IF INHALED

P304 + P312-IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352-Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338-Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312-IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280-Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376-Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260-Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280-Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

## Advice on general occupational hygiene

P264-Wash contaminated parts thoroughly after handling.

## RIP-Assay Kit for microRNA

P270-Do not eat, drink or smoke when using this product.

## 7.2 Storage

Conditions for safe storage

P233-Keep container tightly closed.

P235 + P410-Keep cool. Protect from sunlight.

P401-Store in accordance with local/national regulation.

Container and packaging materials for safe handling

P234-Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

Derived No-Effect Level (DNEL)

No DNELs available.

Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

## RIP-Assay Kit for microRNA

## Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

## 10.1 Reactivity

Reactivity data is not available.

## 10.2 Chemical stability

Stable under normal storage/handling conditions.

## 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

## 10.4 Conditions to avoid

Conditions to avoid data is not available.

## 10.5 Incompatible materials

Incompatible materials data is not available.

## 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

## 11.1 Information on toxicological effects

Acute toxicity data is not available.

## Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

## Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

## 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

Toxicity data is not available.

## 12.2 Persistence and degradability

Persistence and degradability data is not available.

## 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## 12.4 Mobility in soil

## RIP-Assay Kit for microRNA

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## RIP-Assay Kit for microRNA

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

## MARPOL Annex II – Noxious Liquid Substances

Noxious Liquid Substances ; Cat. Z equiv.

Sodium chloride

Non Noxious Liquid Substances ; Cat. OS

Water

## MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

## U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Sodium chloride; Water

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

## Revision information

First edition

## General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1005\_E-1

Component : mi-Solution I

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Proteinase K from Tritirachium album	2.00	39450-01-6	254-457-8	-
Tris(hydroxymethyl)aminomethane Hydrochloride	0.16	1185-53-1	214-684-5	-
Glycerin	50.00	56-81-5	200-289-5	-
Calcium chloride	0.01	10043-52-4	233-140-8	Eye Irrit. 2, H319
Water	45.00<	7732-18-5	231-791-2	-

## RIP-Assay Kit for microRNA

## Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

## Section 4. First-aid measures

## 4.1 Descriptions of first-aid measures

## General measures

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## RIP-Assay Kit for microRNA

## Preventive measures

(Exposure Control for handling personnel)

P260-Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280-Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

## Advice on general occupational hygiene

P264-Wash contaminated parts thoroughly after handling.

P270-Do not eat, drink or smoke when using this product.

## 7.2 Storage

## Conditions for safe storage

P233-Keep container tightly closed.

P235 + P410-Keep cool. Protect from sunlight.

P401-Store in accordance with local/national regulation.

## Container and packaging materials for safe handling

P234-Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

## Occupational Exposure Limit

## ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

## OSHA-PEL

(Glycerin)

TWA: 15mg/m<sup>3</sup> (Total dust)TWA: 5mg/m<sup>3</sup> (Respirable fraction)

## NIOSH-REL

(Glycerin)

See Appendix D

## Derived No-Effect Level (DNEL)

No DNELs available.

## Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

## Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

## Individual protection measures

## Hand protection

Wear protective gloves.

## Eye protection

Wear eye/face protection.

## Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## RIP-Assay Kit for microRNA

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

## 10.1 Reactivity

Reactivity data is not available.

## 10.2 Chemical stability

Stable under normal storage/handling conditions.

## 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

## 10.4 Conditions to avoid

Conditions to avoid data is not available.

## 10.5 Incompatible materials

Incompatible materials data is not available.

## 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

## 11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation

[Table 3 of Annex VI to the CLP Regulations]

(Calcium chloride)

Category 2

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

## RIP-Assay Kit for microRNA

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

12.1 Toxicity

Toxicity data is not available.

Water solubility

(Glycerin)

miscible (source: ICSC, 2006)

(Calcium chloride)

74.5 g/100 mL (20°C) (source: ICSC, 2012)

12.2 Persistence and degradability

Persistence and degradability data is not available.

12.3 Bioaccumulative potential

(Glycerin)

log Pow: -1.76 (source: ICSC, 2006)

12.4 Mobility in soil

Mobility in soil data is not available.

12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

P273-Avoid release to the environment.

P501-Dispose of contents/container in accordance with local/national regulation.

Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

## RIP-Assay Kit for microRNA

## 14.4 Packing group : Not regulated

ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

IATA (Dangerous Goods Regulations)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

- Noxious Liquid Substances ; Cat. Z
- Glycerin
- Noxious Liquid Substances ; Cat. Z equiv.
- Calcium chloride
- Non Noxious Liquid Substances ; Cat. OS
- Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Glycerin; Tris(hydroxymethyl)aminomethane Hydrochloride; Water; Calcium chloride

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

Full text of Hazard categories and Hazard statements referred to only section 3

Eye Irrit. 2, H319 – Serious eye damage/eye irritation, Category 2: H319 Causes serious eye irritation

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN  
Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN  
IMDG Code, 2024 Edition (Incorporating Amendment 42-24)  
IATA Dangerous Goods Regulations (66th Edition) 2025  
2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2025 TLVs and BEIs. (ACGIH)  
Supplier's data/information  
Hazard Communication Standard – 2012 (29 CFR 1910.1200)  
Chemicals safety data management system "GHS Assistant" Version 4.33  
(<https://www.asahi-ghs.com/>)

Revision information

First edition

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1006\_E-1

Component : mi-Solution II

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Urea	48.5	57-13-6	200-315-5	-
Sodium chloride	1.17	7647-14-5	231-598-3	-
n-lauroylsarcosine	1.00	97-78-9	202-608-3	-
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	2.42	77-86-1	201-064-4	-
Disodium dihydrogen ethylenediaminetetraacetate	0.37	6381-92-6	-	-
Water	45.00<	7732-18-5	231-791-2	-

## RIP-Assay Kit for microRNA

## Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

## Section 4. First-aid measures

## 4.1 Descriptions of first-aid measures

## General measures

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## RIP-Assay Kit for microRNA

## Preventive measures

(Exposure Control for handling personnel)

P260–Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280–Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

## Advice on general occupational hygiene

P264–Wash contaminated parts thoroughly after handling.

P270–Do not eat, drink or smoke when using this product.

## 7.2 Storage

## Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

## Container and packaging materials for safe handling

P234–Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

## Occupational Exposure Limit

## ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

## Derived No-Effect Level (DNEL)

No DNELs available.

## Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

## Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

## Individual protection measures

## Hand protection

Wear protective gloves.

## Eye protection

Wear eye/face protection.

## Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

## RIP-Assay Kit for microRNA

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: 7.8–8.3

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

### 10.1 Reactivity

Reactivity data is not available.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

### 10.4 Conditions to avoid

Conditions to avoid data is not available.

### 10.5 Incompatible materials

Incompatible materials data is not available.

### 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity data is not available.

#### Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

#### Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

### 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## RIP-Assay Kit for microRNA

## Section 12. Ecological Information

## 12.1 Toxicity

Toxicity data is not available.

## Water solubility

(Urea)

miscible (source: ICSC, 1997)

## 12.2 Persistence and degradability

Persistence and degradability data is not available.

## 12.3 Bioaccumulative potential

(Urea)

log Pow: -3.00 - -1.54 (source: ICSC, 1997)

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273-Avoid release to the environment.

P501-Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RIP-Assay Kit for microRNA

## IMDG Code (International Maritime Dangerous Goods Regulations)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

- 14.1 UN Number or ID Number : Not regulated
- 14.2 UN Proper Shipping Name : Not regulated
- 14.3 Class or division (Transport hazard class) : Not regulated
- 14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

## MARPOL Annex II – Noxious Liquid Substances

- Noxious Liquid Substances ; Cat. Z
- Urea
- Noxious Liquid Substances ; Cat. Z equiv.
- Sodium chloride
- Non Noxious Liquid Substances ; Cat. OS
- Water

## MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

## U.S. Toxic Substances Control Act (TSCA) Inventory

## Chemicals listed in TSCA Inventory

Urea; 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-; n-lauroylsarcosine; Sodium chloride;  
Water

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN  
Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN  
IMDG Code, 2024 Edition (Incorporating Amendment 42-24)  
IATA Dangerous Goods Regulations (66th Edition) 2025  
2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2025 TLVs and BEIs. (ACGIH)  
Supplier's data/information  
Hazard Communication Standard – 2012 (29 CFR 1910.1200)  
Chemicals safety data management system "GHS Assistant" Version 4.33  
(<https://www.asahi-ghs.com/>)

## Revision information

First edition

## General Disclaimer

This data sheet was created based on the information we currently have and may be revised

according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO: RN1005\_1007\_E-1

Component: mi-Solution III

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

##### HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2

(Note) GHS classification without description: Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)



Signal word: Warning

##### HAZARD STATEMENT

H302-Harmful if swallowed

H315-Causes skin irritation

H319-Causes serious eye irritation

##### PRECAUTIONARY STATEMENT

###### Prevention

P264-Wash contaminated parts thoroughly after handling.

P280-Wear protective gloves.

P280-Wear eye protection/face protection.

P270-Do not eat, drink or smoke when using this product.

###### Response

P321-Specific treatment is required.

P302 + P352-IF ON SKIN: Wash with plenty of soap and water.

P332 + P313-If skin irritation occurs: Get medical advice/attention.

P362 + P364-Take off contaminated clothing and wash it before reuse.

## RIP-Assay Kit for microRNA

P305 + P351 + P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313-If eye irritation persists: Get medical advice/attention.

P330-Rinse mouth.

P301 + P312-IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

#### Disposal

P501-Dispose of contents/container in accordance with local/national regulation.

### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

## Section 3. Composition/information on ingredients

Mixture/Substance selection:

### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Guanidine monohydrochloride	<80.00	50-01-1	200-002-3	Acute Tox. 4 *, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319
Water	20.00<	7732-18-5	231-791-2	-

#### Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

## Section 4. First-aid measures

### 4.1 Descriptions of first-aid measures

#### General measures

P314-Get medical advice/attention if you feel unwell.

#### IF INHALED

P304 + P312-IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

#### IF ON SKIN (or hair)

P302 + P352-Wash with plenty of soap and water.

P332 + P313-If skin irritation occurs: Get medical advice/attention.

#### IF IN EYES

P305 + P351 + P338-Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313-If eye irritation persists: Get medical advice/attention.

#### IF SWALLOWED

P330-Rinse mouth.

P301 + P312-IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

### 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

P321-Specific treatment is required.

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## RIP-Assay Kit for microRNA

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280-Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376-Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260-Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P280-Wear protective gloves.

P280-Wear eye protection/face protection.

Any incompatibilities data is not available.

## Advice on general occupational hygiene

P264-Wash contaminated parts thoroughly after handling.

P270-Do not eat, drink or smoke when using this product.

P362 + P364-Take off contaminated clothing and wash it before reuse.

## 7.2 Storage

## Conditions for safe storage

P233-Keep container tightly closed.

P235 + P410-Keep cool. Protect from sunlight.

P401-Store in accordance with local/national regulation.

## Container and packaging materials for safe handling

P234-Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

## RIP-Assay Kit for microRNA

## ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

Derived No-Effect Level (DNEL)

No DNELs available.

Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

## 10.1 Reactivity

Reactivity data is not available.

## 10.2 Chemical stability

## RIP-Assay Kit for microRNA

Stable under normal storage/handling conditions.

## 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

## 10.4 Conditions to avoid

Conditions to avoid data is not available.

## 10.5 Incompatible materials

Incompatible materials data is not available.

## 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

## 11.1 Information on toxicological effects

## Acute toxicity

Acute toxicity (Oral)

[Table 3 of Annex VI to the CLP Regulations]

(Guanidine monohydrochloride)

Category 4

## Irritant properties

Skin corrosion/irritation

[Table 3 of Annex VI to the CLP Regulations]

(Guanidine monohydrochloride)

Category 2

Serious eye damage/irritation

[Table 3 of Annex VI to the CLP Regulations]

(Guanidine monohydrochloride)

Category 2

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

## Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

## 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

Toxicity data is not available.

## Water solubility

(Guanidine monohydrochloride)

215 g/100 mL (20°C) (source: ICSC, 2000)

## 12.2 Persistence and degradability

Persistence and degradability data is not available.

## 12.3 Bioaccumulative potential

(Guanidine monohydrochloride)

log Pow: -1.7 (source: ICSC, 2000)

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

## RIP-Assay Kit for microRNA

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Guanidine monohydrochloride; Water

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## GHS classification and labelling

H302–Acute toxicity, Category 4: H302 Harmful if swallowed

H315–Skin corrosion/irritation, Category 2: H315 Causes skin irritation

H319–Serious eye damage/eye irritation, Category 2: H319 Causes serious eye irritation

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

[\(https://www.asahi-ghs.com/\)](https://www.asahi-ghs.com/)

## General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1008\_E-1

Component: mi-Solution IV

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Dextran	3.00	9004-54-0	232-677-5	-
Water	95.00<	7732-18-5	231-791-2	-

#### Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

### Section 4. First-aid measures

#### 4.1 Descriptions of first-aid measures

##### General measures

## RIP-Assay Kit for microRNA

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260–Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280–Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

Advice on general occupational hygiene

## RIP-Assay Kit for microRNA

P264–Wash contaminated parts thoroughly after handling.

P270–Do not eat, drink or smoke when using this product.

## 7.2 Storage

Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

Container and packaging materials for safe handling

P234–Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

Derived No-Effect Level (DNEL)

No DNELs available.

Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

## RIP-Assay Kit for microRNA

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

### 10.1 Reactivity

Reactivity data is not available.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

### 10.4 Conditions to avoid

Conditions to avoid data is not available.

### 10.5 Incompatible materials

Incompatible materials data is not available.

### 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

### 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

### 12.1 Toxicity

Toxicity data is not available.

### 12.2 Persistence and degradability

Persistence and degradability data is not available.

### 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## RIP-Assay Kit for microRNA

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## 14.5 Environmental hazards

## RIP-Assay Kit for microRNA

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Water; Dextran

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

## Revision information

First edition

## General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1009\_E-1

Component: Gel Extraction Buffer

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Sodium acetate	2.43	127-09-3	204-823-8	-
Water	95.00<	7732-18-5	231-791-2	-

#### Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

### Section 4. First-aid measures

#### 4.1 Descriptions of first-aid measures

##### General measures

## RIP-Assay Kit for microRNA

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260–Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280–Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

Advice on general occupational hygiene

## RIP-Assay Kit for microRNA

P264–Wash contaminated parts thoroughly after handling.

P270–Do not eat, drink or smoke when using this product.

## 7.2 Storage

Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

Container and packaging materials for safe handling

P234–Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

Derived No-Effect Level (DNEL)

No DNELs available.

Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: 5.0–5.3

## RIP-Assay Kit for microRNA

Kinematic viscosity data is not available.

Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

### 10.1 Reactivity

Reactivity data is not available.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

### 10.4 Conditions to avoid

Conditions to avoid data is not available.

### 10.5 Incompatible materials

Incompatible materials data is not available.

### 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

### 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

### 12.1 Toxicity

Toxicity data is not available.

Water solubility

(Sodium acetate)

46.5 g/100 mL (20°C) (source: ICSC, 2006)

### 12.2 Persistence and degradability

## RIP–Assay Kit for microRNA

Persistence and degradability data is not available.

## 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

## RIP-Assay Kit for microRNA

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Noxious Liquid Substances ; Cat. Z

Sodium acetate

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Sodium acetate; Water

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42-24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

## Revision information

First edition

## General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



RIP-Assay Kit for microRNA

Issue date: 11/Jun/2025

## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO : RN1005\_1010\_E-1

Component: 3M NaOAc

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical &amp; Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

##### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

##### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

##### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Sodium acetate	24.61	127-09-3	204-823-8	-
Water	75.00<	7732-18-5	231-791-2	-

#### Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

### Section 4. First-aid measures

#### 4.1 Descriptions of first-aid measures

##### General measures

## RIP-Assay Kit for microRNA

P314–Get medical advice/attention if you feel unwell.

## IF INHALED

P304 + P312–IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352–Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338–Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312–IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280–Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376–Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260–Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280–Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

Advice on general occupational hygiene

## RIP-Assay Kit for microRNA

P264–Wash contaminated parts thoroughly after handling.

P270–Do not eat, drink or smoke when using this product.

## 7.2 Storage

Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

Container and packaging materials for safe handling

P234–Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

ACGIH

Not established

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

Derived No-Effect Level (DNEL)

No DNELs available.

Predicted No-Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Liquid

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH: 5.5

Kinematic viscosity data is not available.

## RIP-Assay Kit for microRNA

## Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

## 10.1 Reactivity

Reactivity data is not available.

## 10.2 Chemical stability

Stable under normal storage/handling conditions.

## 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

## 10.4 Conditions to avoid

Conditions to avoid data is not available.

## 10.5 Incompatible materials

Incompatible materials data is not available.

## 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

## 11.1 Information on toxicological effects

Acute toxicity data is not available.

## Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

## Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

## 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

Toxicity data is not available.

## Water solubility

(Sodium acetate)

46.5 g/100 mL (20°C) (source: ICSC, 2006)

## 12.2 Persistence and degradability

Persistence and degradability data is not available.

## RIP-Assay Kit for microRNA

## 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

## RIP-Assay Kit for microRNA

14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Noxious Liquid Substances ; Cat. Z

Sodium acetate

Non Noxious Liquid Substances ; Cat. OS

Water

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Sodium acetate; Water

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

## Revision information

First edition

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The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.



## Safety Data Sheet

### Section 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Product name: RIP-Assay Kit for microRNA

SDS NO: RN1005\_1011\_E-1

Component: miSPIKE

Product code: RN1005

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the product: Research and Development

Uses advised against: Ask for the judgment of an expert when using for purposes other than recommended uses.

#### 1.3 Details of the supplier of the safety data sheet

Supplier: Medical & Biological Laboratories Co., Ltd.

Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan

Division: SDS Support

Telephone number: +81-265-76-1777

e-mail address: sds-support@mbi.co.jp

#### 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST)

### Section 2. Hazards identification

#### GHS classification and label elements of the product

#### 2.1 Classification of the substance or mixture

Classification according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Not classified/Classification not possible

#### 2.2 Label elements

Labelling according to Hazard Communication Standard – 2012 (29 CFR 1910.1200)

No GHS label element

No Signal word

#### 2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

#### 3.2 Mixture

Ingredient name	Content (%)	CAS No.	EC No.	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Non Hazardous Substance	100	-	-	-

#### Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

### Section 4. First-aid measures

#### 4.1 Descriptions of first-aid measures

##### General measures

P314-Get medical advice/attention if you feel unwell.

## RIP-Assay Kit for microRNA

## IF INHALED

P304 + P312-IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

## IF ON SKIN (or hair)

P302 + P352-Wash with plenty of soap and water.

## IF IN EYES

P305 + P351 + P338-Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## IF SWALLOWED

P301 + P312-IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

## 4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## Section 5. Fire-fighting measures

## 5.1 Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

## 5.3 Advice for firefighters

## Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

## Special protective equipment and precautions for fire-fighters

P280-Wear protective gloves/protective clothing/eye protection/face protection.

## Section 6. Accidental release measures

## 6.1 Personnel precautions, protective equipment and emergency procedures

Stop leak if safe to do so.

## 6.2 Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

## 6.3 Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

## Preventive measures for secondary accident

P376-Stop leak if safe to do so.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

## 6.4 Reference to other sections

Refer to section 13

## Section 7. Handling and storage

## 7.1 Precautions for safe handling

## Preventive measures

(Exposure Control for handling personnel)

P260-Do not breathe dust/fume/gas/mist/vapors/spray.

## Safety Measures

P280-Wear protective gloves/protective clothing/eye protection/face protection.

Any incompatibilities data is not available.

## Advice on general occupational hygiene

P264-Wash contaminated parts thoroughly after handling.

## RIP-Assay Kit for microRNA

P270–Do not eat, drink or smoke when using this product.

## 7.2 Storage

Conditions for safe storage

P233–Keep container tightly closed.

P235 + P410–Keep cool. Protect from sunlight.

P401–Store in accordance with local/national regulation.

Container and packaging materials for safe handling

P234–Keep only in original packaging.

## 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## Section 8. Exposure controls/personal protection

## 8.1 Control parameters

Occupational Exposure Limit

ACGIH

(Non Hazardous Substance)

TWA: 10mg/m<sup>3</sup> (Dental erosion)

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU Directive through 91/332/EEC to 2019/1831/EU

Not established

OSHA–PEL

(Non Hazardous Substance)

TWA: 15mg/m<sup>3</sup> (total dust)

TWA: 5mg/m<sup>3</sup> (Respirable fraction)

NIOSH–REL

(Non Hazardous Substance)

TWA: 10mg/m<sup>3</sup> (total dust)

TWA: 5mg/m<sup>3</sup> (Respirable fraction)

Derived No–Effect Level (DNEL)

No DNELs available.

Predicted No–Effect Concentrations (PNEC)

No PNECs available.

## 8.2 Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Washing facilities should be available.

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

## Section 9. Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties

Physical state: Powder/granule

Color: White

Odor data is not available.

Odor threshold data is not available.

Melting point/Freezing point data is not available.

## RIP-Assay Kit for microRNA

Boiling point or initial boiling point data is not available.  
Boiling range data is not available.  
Flammability (gases, liquids and solids) data is not available.  
Lower and upper explosion limit/flammability limit data is not available.  
Flash point data is not available.  
Auto-ignition temperature data is not available.  
Decomposition temperature data is not available.  
pH data is not available.  
Kinematic viscosity data is not available.  
Solubility:

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

## 9.2 Other information

Other information is not available.

## Section 10. Stability and Reactivity

### 10.1 Reactivity

Reactivity data is not available.

### 10.2 Chemical stability

Stable under normal storage/handling conditions.

### 10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

### 10.4 Conditions to avoid

Conditions to avoid data is not available.

### 10.5 Incompatible materials

Incompatible materials data is not available.

### 10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity data is not available.

#### Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

#### Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

### 11.2 Information on other hazards

Endocrine disrupting properties is not available.

## Section 12. Ecological Information

## 12.1 Toxicity

Toxicity data is not available.

## 12.2 Persistence and degradability

Persistence and degradability data is not available.

## 12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

## 12.4 Mobility in soil

Mobility in soil data is not available.

## 12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

## 12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

## 12.7 Other adverse effects

PMT and/or vPvM assessment data is not available.

Ozone depleting chemical data is not available.

## Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

## 13.1 Waste treatment methods

P273–Avoid release to the environment.

P501–Dispose of contents/container in accordance with local/national regulation.

## Contaminated packing

Dispose of container after using the contents completely.

## Section 14. Transport Information

## UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## RID (Regulation concerning the International Carriage of Dangerous goods by Rail)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

## RIP-Assay Kit for microRNA

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

## 14.5 Environmental hazards

Marine pollutants (yes/no) : no

## 14.6 Special precautions for user

Special precautions for user is not applicable.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable to Transport in bulk according to Annex II of MARPOL and the IBC Code

MARPOL Annex V – HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

## Section 15. Regulatory Information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.

U.S. Toxic Substances Control Act (TSCA) Inventory

All components are listed or exempted.

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

## Section 16. Other information

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN

IMDG Code, 2024 Edition (Incorporating Amendment 42–24)

IATA Dangerous Goods Regulations (66th Edition) 2025

2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2025 TLVs and BEIs. (ACGIH)

Supplier's data/information

Hazard Communication Standard – 2012 (29 CFR 1910.1200)

Chemicals safety data management system "GHS Assistant" Version 4.33

(<https://www.asahi-ghs.com/>)

## Revision information

First edition

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