

SAFETY DATA SHEET

1. Identification	
Product identifier	Anti-SRSF9 (SRp30c) pAb
Other means of identification	
Product code	RN081PW
Recommended use	Research use only.
Recommended restrictions	None known.
Manufacturer / Importer / Sup	plier / Distributor information
Manufacturer and	Medical & Biological Laboratories (MBL) Co., Ltd.
Supplier (Asia)	4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan
Telephone number	+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)
Fax	+81-52-238-1440
E-mail	sds-support@mbl.co.jp
URL	http://www.mbl.co.jp/e/index.html
Contact person	SDS Support
Supplier	MBL International Corporation
	15A Constitution Way, Woburn, MA 01801, USA
Telephone number	+1-800-200-5459, option 3
Fax	+1-781-939-6963
E-mail	tech@mblintl.com
URL	http://www.mblintl.com/
Contact person	Technical Service

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA hazard(s)	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash thoroughly after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None.

3. Composition/Information on ingredients

Mix	tures			
	Chemical name	CAS number	%	
	Glycerol (Glycerin)	56-81-5	50 - 60	
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Composition c	omments
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All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First aid measures

Inhalation

Skin contact

Move to fresh air. Get medical attention if discomfort develops or persists. Remove contaminated clothing. Wash with soap and water. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops or persists.
Ingestion	Drink plenty of water. Seek medical advice.
Most important symptoms/ effects, acute and delayed	Irritation of eyes and mucous membranes. Mild skin irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Get medical attention if any discomfort develops.

5. Fire fighting measures

Suitable extinguishing media Unsuitable extinguishing media	Water. Foam. Dry powder. Carbon dioxide (CO2). None known.
Specific hazards arising from the chemical	Fire or high temperatures create: Carbon oxides.
Special protective equipment and precautions for	Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
firefighters	
Fire-fighting equipment/instructions	Move containers from fire area if you can do that without risk. Use water spray to cool unopened containers. Prevent entry to sewers and pubic waters.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section 8 of the SDS.	
Methods and materials for containment and cleaning up	Dike far ahead of liquid spill for later disposal. Small Spills: Absorb spillage with suitable absorbent material. Clean contaminated surface thoroughly. After removal, flush contaminated area thoroughly with water. Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.	
Environmental precautions	Prevent further leakage or spillage if safe to do so.	
7. Handling and storage		
Precautions for safe handling	Provide adequate ventilation. Use work methods which minimize production of vapors and mists. Avoid inhalation of mist and contact with skin and eyes. Wash hands after handling. Observe good industrial hygiene practices.	

Conditions for safe storage, Keep container tightly closed. Store away from incompatible materials.

including any incompatibilities

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Components	Туре	Value	Form
Glycerol (CAS 56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 ma/m3	Total dust.

Components	Туре	Value	Form
Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Mist.

Exposure guidelines No exposure standards allocated.

Appropriate engineering Provide adequate ventilation and minimize the risk of inhalation of vapors and mists.

controls

Individual protection measures, such as personal protective equipment

Eye/face protectionWear safety glasses.Skin protection

Hand protection	Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with combination filter (gas filter/dust filter). Seek advice from local supervisor.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Physical state Form Color Odor Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	
Form Color Odor Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	
Color Odor Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Liquid.
Odor Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Viscous liquid.
Odor threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Colorless.
pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Odorless.
Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Initial boiling point and boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Neutral.
boiling range Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Flash point Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Evaporation rate Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	
Flammability (solid, gas) Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Upper/lower flammability or e Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Flammability limit - lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not applicable.
- lower (%) Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	xplosive limits
Flammability limit - upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
- upper (%) Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	
Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Vapor density Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	
Relative density Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Solubility(ies) Partition coefficient (<i>n</i> -octanol/water)	Not available.
Partition coefficient (<i>n</i> -octanol/water)	Not available.
(<i>n</i> -octanol/water)	Soluble in water
	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity Chemical stability	The product is non-reactive under normal conditions of use, storage and transport. Stable at normal conditions.
Possibility of hazardous reactions	Hazardous reactions do not occur.
Conditions to avoid Incompatible materials Hazardous decomposition products	Strong heating. Contact with incompatible materials. Strong oxidizing agents. None known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Ingestion may cause irritation and malaise.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation
	hazard.

Skin contact	May cause skin irritation. Causes skin irritation.	
Eye contact	May cause eye irritation on direct contact. Causes eye irritation.	
Symptoms related to the	Irritation of eyes and mucous membranes. Mild skin irritation.	
physical, chemical and		
toxicological characteristics		
Information on toxicological effects		
Acute toxicity	Ingestion may cause irritation and malaise.	
Skin corrosion/irritation	May cause skin irritation.	
Serious eye damage/eye	May cause eye irritation on direct contact.	
irritation		
Respiratory sensitization	Not classified.	
Skin sensitization	Not a skin sensitizer.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	IARC not listed.	
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	Knowledge about health hazard is incomplete.	
Specific target organ toxicity - repeated exposure	Knowledge about health hazard is incomplete.	
Aspiration hazard	Not classified.	
12. Ecological information		

12. Ecological informatio	n	
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment.	
Persistence and degradability	The product is biodegradable.	
Bioaccumulative potential	The product is not bioaccumulating.	
Partition coefficient <i>n</i> -octanol / water (log Kow)		
	Glycerol (CAS 56-81-5)	-1.76
Mobility in soil	Expected to be highly mobile in soil.	
Mobility in general	The product is water soluble and may spread in water systems.	
Other adverse effects	No data available.	

13. Disposal considerations

Disposal instructions	Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused	Dispose of in accordance with local regulations.
products	
Contaminated packaging	Dispose of in same manner as unused product.

14. Transport information

DOT	Not regulated as a dangerous good.
ΙΑΤΑ	Not regulated as a dangerous good.
IMDG	Not regulated as a dangerous good.
Transport in bulk according	Not applicable.
to Annex II of MARPOL 73/78	
and the IBC Code	

15. Regulatory information

US federal regulations This product is hazardous according to OSHA 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)Not regulated.OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)Not regulated.CERCLA Hazardous Substance List (40 CFR 302.4)Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Yes

Yes

Hazard categories		Immediate Hazard - Yes
		Delayed Hazard - No
		Fire Hazard - No
		Pressure Hazard - No
		Reactivity Hazard - No
SARA 302 Extremely ha		No
SARA 311/312 Hazardou	is chemical	Yes
Other federal regulations		
Clean Air Act (CAA) Sec	tion 112 Hazardous Air Pollutants (HAPs) List	Not regulated.
Clean Air Act (CAA) Sec	tion 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated.
Safe Drinking Water Act	(SDWA)	Not regulated.
Drug Enforcement Adm	inistration (DEA). List 2, Essential Chemicals (21 CFR	Not listed.
1310.02(b) and 1310.04(i	i)(2) and Chemical Code Number	
-	nistration (DEA). List 1 & 2 Exempt Chemical Mixtures (21	Not regulated.
CFR 1310.12(c))		
DEA Exempt Chemical		Not regulated.
Food and Drug Administration (FDA)		Not regulated.
r ood and Drug / annio		•
US state regulations	This product does not contain a chemical known to the State of	^c California to cause cancer,
US state regulations	This product does not contain a chemical known to the State of birth defects or other reproductive harm.	
US state regulations Massachusetts RTK - Su	This product does not contain a chemical known to the State of birth defects or other reproductive harm.	Glycerol (CAS 56-81-5)
US state regulations Massachusetts RTK - Su New Jersey Worker and	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act	Glycerol (CAS 56-81-5) Not regulated.
US state regulations Massachusetts RTK - So New Jersey Worker and Pennsylvania RTK - Haz	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5)
US state regulations Massachusetts RTK - So New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5)
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US state regulations Massachusetts RTK - Su New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5)
US state regulations Massachusetts RTK - So New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6 International Inventories	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances 5 - Carcinogens & Reproductive Toxicity (CRT) Inventory name Australian Inventory of Chemical Substances (AICS)	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5) Not listed.
US state regulations Massachusetts RTK - Su New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6 International Inventories Country(s) or region	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances 5 - Carcinogens & Reproductive Toxicity (CRT) Inventory name Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL)	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5) Not listed. On inventory (yes/no)*
US state regulations Massachusetts RTK - Su New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6 International Inventories Country(s) or region Australia	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances 5 - Carcinogens & Reproductive Toxicity (CRT) Inventory name Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL) Non-Domestic Substances List (NDSL)	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5) Not listed. On inventory (yes/no)* Yes
US state regulations Massachusetts RTK - So New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6 International Inventories Country(s) or region Australia Canada	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances 5 - Carcinogens & Reproductive Toxicity (CRT) Inventory name Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL) Non-Domestic Substances List (NDSL) Inventory of Existing Chemical Substances in China (IECSC)	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5) Not listed. On inventory (yes/no)* Yes Yes
US state regulations Massachusetts RTK - Su New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6 International Inventories Country(s) or region Australia Canada Canada China Europe	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances 5 - Carcinogens & Reproductive Toxicity (CRT) Inventory name Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL) Non-Domestic Substances List (NDSL) Inventory of Existing Chemical Substances in China (IECSC) EC Inventory	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5) Not listed. On inventory (yes/no)* Yes Yes No
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US state regulations Massachusetts RTK - Su New Jersey Worker and Pennsylvania RTK - Haz Rhode Island RTK California Proposition 6 International Inventories Country(s) or region Australia Canada Canada China Europe	This product does not contain a chemical known to the State of birth defects or other reproductive harm. Ibstance List Community Right-to-Know Act ardous Substances 5 - Carcinogens & Reproductive Toxicity (CRT) Inventory name Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL) Non-Domestic Substances List (NDSL) Inventory of Existing Chemical Substances in China (IECSC) EC Inventory	Glycerol (CAS 56-81-5) Not regulated. Glycerol (CAS 56-81-5) Glycerol (CAS 56-81-5) Not listed. On inventory (yes/no)* Yes Yes No Yes Yes

United States & Puerto Rico

Philippines

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

Philippine Inventory of Chemicals and Chemical Substances (PICCS)

16. Other information

Issue date	09/28/2011
Revision date	09/30/2016
Version	10
Further information	Not available.
References	IUCLID
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.