

MONOCLONAL ANTIBODY

Anti-CD120a (TNF-R1) (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
K0039-3	H398	Mouse IgG2a	100 μ L	1 mg/mL

BACKGROUND: Tumor necrosis factor receptor 1 (TNF-R1/CD120a) is a member of TNF receptor family, includes Fas/Apo1 (CD95), CD30, OX40 (CD134), and 4-1BB (CD137), which are characterized by cysteine rich motifs in the extracellular domain. TNF-R1 contains an approximately 80 amino acid death domain near its carboxy terminus capable of transmitting an apoptotic signal through its interaction with TRADD (TNF-R1 associated death domain protein), and subsequent interactions with FADD. TNF-R1 can also activate the transcription factor NF- κ B via TRAF2 (TNF receptor associated factor 2). The cytoplasmic domain of TNF-R1 can directly interact with Jak kinase, thereby activating the JAK/STAT signal transduction cascade.

SOURCE: This antibody was purified from hybridoma (clone H398) supernatant using protein A agarose. This hybridoma was established by fusion of mouse myeloma cell NSO with Balb/c mouse splenocyte immunized with affinity-purified receptor material derived from HL-60.

FORMULATION: 100 μ g IgG in 100 μ L volume of PBS containing 50% glycerol, pH 7.2. No preservative is contained.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at -20°C.

REACTIVITY: This antibody reacts with human TNF-R1 on Flow cytometry. This antibody has been described, that competed for TNF binding to human TNF-R1.

APPLICATIONS:

- Western blotting; Not tested
- Immunoprecipitation; Not tested
- Immunohistochemistry; Not tested
- Immunocytochemistry; Not tested
- Flow cytometry; 10 μ g/mL (final concentration)

Detailed procedure is provided in the following **PROTOCOL**.

INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

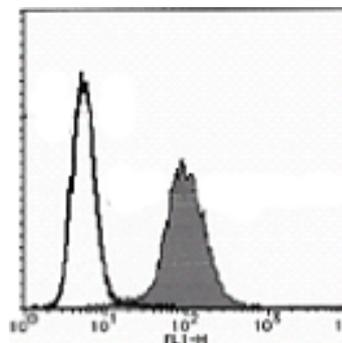
SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat
Cells	THP-1, HL-60	Not tested	Not tested
Reactivity on FCM	+		

REFERENCES:

- 1) Fotin-Mlecsek, M., *et al.*, *J. Cell Sci.* **118**, 3339-3351 (2005)
- 2) Eissner, G., *et al.*, *J. Immunol.* **164**, 6193-6198 (2000)
- 3) Haas, E., *et al.*, *J. Biol. Chem.* **274**, 18107-18112 (1999)
- 4) Grell, M., *et al.*, *PNAS* **95**, 570-575 (1998)
- 5) Richter, J., *et al.*, *J. Immunol.* **154**, 4142-4149 (1995)
- 6) Menegazzi, R., *et al.*, *Blood* **84**, 287-293 (1994)
- 7) Kruppa, G., *et al.*, *J. Immunol.* **148**, 3152-3157 (1992)
- 8) Thoma, B., *et al.*, *J. Exp. Med.* **172**, 1019-1023 (1990)

Clone H398 is used in these references.



Flow cytometric analysis of TNF-R1 expression on THP-1 cells. Open histogram indicates the reaction of isotypic control to the cells. Shaded histogram indicates the reaction of K0039-3 to the cells.

PROTOCOL:

Flow cytometric analysis for floating cells

We usually use Fisher tubes or equivalents as reaction tubes for all step described below.

- 1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.09% NaN₃].
*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.
- 2) Resuspend the cells with washing buffer (5x10⁶ cells/mL).
- 3) Add 50 μ L of the cell suspension into each tube, and centrifuge at 500 x g for 1 minute at room temperature (20~25°C). Remove supernatant by careful aspiration.

- 4) Add 20 μ L of normal goat serum containing 1 mg/mL normal human IgG and 0.09% NaN_3 or 20 μ L of Clear Back (human Fc receptor blocking reagent, MBL; code no. MTG-001) to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature.
- 5) Add 40 μ L of the primary antibody at the concentration of as suggest in the **APPLICATIONS** diluted in the washing buffer. Mix well and incubate for 30 minutes at room temperature.
- 6) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
- 7) Add FITC-onjugated anti-mouse IgG antibody with the washing buffer. Mix well and incubate for 15 minutes at room temperature.
- 8) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
- 9) Resuspend the cells with 500 μ L of the washing buffer and analyze by a flow cytometer.

(Positive control for Flow cytometry; THP-1)

RELATED PRODUCTS:

- M073-3 Anti-Caspase-2 (Human) mAb (4F8)
- M097-3 Anti-Caspase-3 (Human) mAb (1F3)
- K0197-3 Anti-Caspase-3 (Human) mAb (AMI-3-1-11)
- M087-3 Anti-Caspase-3 (Human) mAb (1F9)
- M088-3 Anti-Caspase-3 (Human) mAb (7D12)
- M029-3 Anti-Caspase-4 (Human) mAb (4B9)
- M060-3 Anti-Caspase-5 mAb (4F7)
- M070-3 Anti-Caspase-6 mAb (3E8)
- M053-3 Anti-Caspase-7 mAb (4G2)
- M032-3 Anti-Caspase-8 (Human) mAb (5F7)
- M058-3 Anti-Caspase-8 (Human) mAb (5D3)
- M054-3 Anti-Caspase-9 mAb (5B4)
- M059-3 Anti-Caspase-10 (Human) mAb (4C1)
- K0206-3 Anti-Caspase-12 mAb (14F7)
- K0207-3 Anti-Caspase-12 mAb (14F4)
- K0193-3 Anti-Caspase-14 (Human) mAb (8-1-71)
- M010-3 Anti-BAX (Human) mAb (4F11)
- M028-3 Anti-TRAF1 (Mouse) mAb (3D4)
- M030-3 Anti-Bag-1 mAb (4A2)
- M033-3 Anti-FADD mAb (1F7)
- M035-3 Anti-FADD (Human) mAb (4G3)
- M037-3 Anti-DFF45 (ICAD) (Human) mAb (6B8)
- M044-3 Anti-XIAP (MIHA/ILP-a) mAb (2F1)
- M056-3 Anti-RAIDD (Human) mAb (4B12)
- M072-3 Anti-BID (Human) mAb (5C9)
- M074-3 Anti-Apaf-1 (Human) mAb (5C1)
- M083-3 Anti-AcinusL (Human) mAb (3H8)
- M112-3 Anti-TRAF2 mAb (6F8)
- SY-001 Anti-Fas (CD95) (Human) mAb (CH-11)
- MD-10-3 Anti-Fas (CD95) (Human) mAb (UB2)
- MD-10-4 Anti-Fas (CD95) (Human) mAb-FITC (UB2)
- MD-11-3 Anti-Fas (CD95) (Human) mAb (ZB4)
- D026-3 Anti-Fas (CD95) (Mouse) mAb (RMF2)
- D027-3 Anti-Fas (CD95) (Mouse) mAb (RMF6)

- D038-3 Anti-Bcl-2 mAb (83-8B)
- D038-5 Anti-Bcl-2 mAb-PE (83-8B)
- D041-3 Anti-Fas Ligand (CD178) (Human) mAb (4H9)
- D041-4 Anti-Fas Ligand (CD178) (Human) mAb-FITC (4H9)
- D041-5 Anti-Fas Ligand (CD178) (Human) mAb-PE (4H9)
- D041-6 Anti-Fas Ligand (CD178) (Human) mAb-Biotin (4H9)
- D042-3 Anti-Fas Ligand (CD178) (Human) mAb (4A5)
- D057-3 Anti-Fas Ligand (CD178) (Mouse) mAb (FLIM58)
- D057-4 Anti-Fas Ligand (CD178) (Mouse) mAb-FITC (FLIM58)
- D057-6 Anti-Fas Ligand (CD178) (Mouse) mAb-Biotin (FLIM58)
- D069-3 Anti-Fas Ligand (CD178) (Mouse) mAb (FLIM4)
- D086-3 Anti-ASC (TMS1) (Human) mAb (23-4)
- D132-3 Anti-CD279 (PD-1) (Human) mAb (J110)
- D132-4 Anti-CD279 (PD-1) (Human) mAb-FITC (J110)
- D133-3 Anti-CD279 (PD-1) (Human) mAb (J105)
- D230-3 Anti-CD274 (PD-L1) (Human) mAb (27A2)
- D231-3 Anti-CD273 (PD-L2) (Mouse) mAb (54-1)
- D161-3 Anti-MFG-E8 (Mouse) mAb (2422)
- D199-3 Anti-MFG-E8 (Mouse) mAb (18A2-G10)
- D184-3 Anti-Granulysin (Human) mAb (RB1)
- D185-3 Anti-Granulysin (Human) mAb (RC8)
- D185-6 Anti-Granulysin (Human) mAb-Biotin (RC8)
- D186-3 Anti-Granulysin (Human) mAb (RF10)
- D200-3 Anti-CD257 (BAFF/BLyS) (Human) mAb (1D6)
- D200-4 Anti-CD257 (BAFF/BLyS) (Human) mAb-FITC (1D6)
- D201-3 Anti-CD268 (BAFF-R/BR3) (Human) mAb (8A7)
- D201-4 Anti-CD268 (BAFF-R/BR3) (Human) mAb-FITC (8A7)
- K0039-4 Anti-CD120a (TNF-R1) (Human) mAb-FITC (H398)
- K0040-3 Anti-CD120b (TNF-R2) (Human) mAb (80M2)
- K0040-4 Anti-CD120b (TNF-R2) (Human) mAb-FITC (80M2)
- K0127-3 Anti-Daxx (Human) mAb (DAXX-01)
- K0145-3 Anti-CD30 (Human) mAb (Ber-H2)
- K0145-4 Anti-CD30 (Human) mAb-FITC (Ber-H2)
- K0157-3 Anti-IKK γ (Human) mAb (DA10-12)
- K0159-3 Anti-IKK γ mAb (EA2-6)
- K0194-3 Anti-HtrA2 (Omi) (Human) mAb (18-1-83)
- CM001-1 Anti-Cytochrome c mAb (1E4)
- PM004 Anti-Smac (DIABLO) pAb (Polyclonal)
- PD005 Anti-Vimentin Fragment (V1) pAb (Polyclonal)
- PD006 Anti-SET β (p41/p42) pAb (Polyclonal)
- PD007 Anti-SET β (p42) (Human) pAb (Polyclonal)
- PD008 Anti-SET β (p41) (Human) pAb (Polyclonal)
- PD039 Anti-cleaved IL-1 β (Mouse) pAb (Polyclonal)
- 591 Anti-Bad pAb (Polyclonal)
- 592 Anti-TRAF2 pAb (Polyclonal)
- 597 Anti-TRAF6 (Mouse) pAb (Polyclonal)
- 4700 MEBCYTO[®] Apoptosis Kit (Annexin V-FITC Kit)
- 8445 MEBSTAIN Apoptosis TUNEL Kit Direct
- 4800 APOPCYTO Caspase-3 Colorimetric Assay Kit
- 4805 APOPCYTO Caspase-8 Colorimetric Assay Kit
- 4810 APOPCYTO Caspase-9 Colorimetric Assay Kit
- 4815 APOPCYTO Caspase-3 Fluorometric Assay Kit
- 4820 APOPCYTO Caspase-8 Fluorometric Assay Kit
- 4825 APOPCYTO Caspase-9 Fluorometric Assay Kit