

MONOCLONAL ANTIBODY

PE labeled CD120b/TNFR2

Code No.	Clone	Subclass	Quantity
K0040-5	80M2	Mouse IgG1	1 mL (50 tests)

BACKGROUND: Tumor necrosis factor- α (TNF- α) is a pleiotropic cytokine that is mainly produced by activated macrophages and lymphocytes. TNF- α mediates a dual role triggering cellular survival or induction of apoptosis. TNF- α binds to two distinct receptors, the 55-kDa TNF receptor 1 (TNFR1; CD120a) and the 75-kDa TNFR2 (CD120b), which are members of the TNFR superfamily. The major difference between TNFR1 and TNFR2 is in their mode of signal transduction. TNFR1 belongs to a subgroup of TNFR superfamily molecules that carries a cytoplasmic death domain (DD). DD TNFR superfamily molecules such as TNFR1 and Fas/CD95 signal primarily via recruitment of DD containing signaling molecules like TRADD, FADD, and RIP. On the other hand, non-DD TNFR superfamily molecules such as TNFR2, CD30, CD40, CD137/4-1BB, and RANK signal by directly binding members of the TNF receptor-associated factor (TRAF) family.

SOURCE: This antibody was purified from hybridoma (clone 80M2) supernatant using protein A agarose. This hybridoma was established by fusion of mouse myeloma cell NSO with Balb/c mouse splenocyte immunized with the recombinant TR80 receptor material.

FORMULATION: 50 tests in 1 mL volume of PBS containing 1% BSA and 0.09% NaN₃.

*Azide may react with copper lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at 4°C.

REACTIVITY: This antibody reacts with CD120b antigen on Flow cytometry.

APPLICATION:

Flow cytometry; 20 μ L (ready for use)

*Please refer to the data sheet (MBL code no. K0040-3) for other applications.

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

INTENDED USE:

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

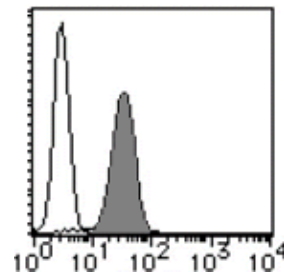
SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat
Cell	U937	Not Tested	Not Tested
Reactivity on FCM	+		

REFERENCES:

- 1) Till, A., *et al.*, *J. Biol. Chem.* **280**, 5994-6004 (2005)
- 2) Krippner-Heidenreich, A., *et al.*, *J. Biol. Chem.* **277**, 44155-44163 (2002)
- 3) Seitz, C., *et al.*, *J. Biol. Chem.* **276**, 19390-19395 (2001)
- 4) Dri, O., *et al.*, *J. Immunol.* **162**, 460-466 (1999)
- 5) Testa, U., *et al.*, *J. Clin. Invest.* **101**, 2278-2289 (1998)
- 6) Eissner, G., *et al.*, *Blood* **86**, 4184-4193 (1995)
- 7) Grell, M., *et al.*, *Cell* **83**, 793-802 (1995)
- 8) Grell, M., *et al.*, *Lymphokine Cytokine Res.* **12**, 143-148 (1993)

Clone 80M2 is used in these references.



Flow cytometric analysis of CD120b/TNFR2 expression on U937. Open histogram indicates the reaction of isotypic control to the cells. Shaded histogram indicates the reaction of K0040-5 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 0.1% NaN₃].
- 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 10 μ L of normal goat serum containing 1 mg/mL normal human IgG and 0.1% NaN₃ to the cell pellet after tapping. Mix well and incubate for 5 minutes at room

temperature.

- 5) Add 20 μ L of the PE labeled CD120b/TNFR2 (80M2). 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) Resuspend the cells with 500 μ L of the washing buffer and analyze by a flow cytometer.

(Positive control for Flow cytometry; U937)

RELATED PRODUCTS:

- M073-3 Anti-Caspase-2 (4F8)
- M097-3 Anti-Caspase-3 (1F3)
- K0197-3 Anti-Caspase-3 (AMI-3-1-11)
- M087-3 Anti-Caspase-3 (1F9)
- M088-3 Anti-Caspase-3 (7D12)
- M029-3 Anti-Caspase-4 (4B9)
- M060-3 Anti-Caspase-5 (4F7)
- M070-3 Anti-Caspase-6 (3E8)
- M053-3 Anti-Caspase-7 (4G2)
- M032-3 Anti-Caspase-8 (5F7)
- M058-3 Anti-Caspase-8 (5D3)
- M054-3 Anti-Caspase-9 (5B4)
- M059-3 Anti-Caspase-10 (4C1)
- K0206-3 Anti-Caspase-12 (14F7)
- K0207-3 Anti-Caspase-12 (14F4)
- K0193-3 Anti-Caspase-14 (8-1-71)
- M010-3 Anti-Bax (4F11)
- M028-3 Anti-Mouse TRAF1 (3D4)
- M030-3 Anti-Bag-1 (4A2)
- M031-3 Anti-TRADD (3E11)
- M033-3 Anti-FADD (1F7)
- M035-3 Anti-FADD (4G3)
- M037-3 Anti-DFF45/ICAD (6B8)
- M044-3 Anti-XIAP (2F1)
- M056-3 Anti-RAIDD (4B12)
- M072-3 Anti-BID (5C9)
- M074-3 Anti-Apaf-1 (5C1)
- M083-3 Anti-AcinusL (3H8)
- M112-3 Anti-Mouse TRAF2 (6F8)
- D026-3 Anti-Mouse Fas (CD95) (RMF2)
- D027-3 Anti-Mouse Fas (CD95) (RMF6)
- D038-3 Anti-Bcl-2 (83-8B)
- D038-5 PE labeled Anti-Bcl-2 (83-8B)
- D041-3 Anti-Human Fas ligand (4H9)
- D041-4 FITC labeled Anti-Human Fas ligand (4H9)
- D041-5 PE labeled Anti-Human Fas ligand (4H9)
- D041-6 Biotin labeled Anti-Human Fas ligand (4H9)
- D042-3 Anti-Human Fas ligand (4A5)
- D057-3 Anti-Mouse Fas ligand (FLIM58)
- D057-4 FITC labeled Anti-Mouse Fas ligand (FLIM58)
- D057-6 Biotin labeled Anti-Mouse Fas ligand (FLIM58)
- D069-3 Anti-Mouse Fas ligand (FLIM4)
- D086-3 Anti-ASC (23-4)
- D132-3 CD279/PD-1 (J110)
- D132-4 FITC labeled CD279/PD-1 (J110)
- D133-3 CD279/PD-1 (J105)
- D230-3 CD274/PD-L1 (27A2)
- D231-3 Mouse CD273/PD-L2 (54-1)
- D161-3 Anti-MFG-E8 (2422)
- D199-3 Anti-MFG-E8 (18A2-G10)
- D184-3 Anti-Granulysin (RB1)
- D185-3 Anti-Granulysin (RC8)
- D185-6 Biotin labeled Anti-Granulysin (RC8)
- D186-3 Anti-Granulysin (RF10)
- D200-3 Anti-Human BAFF/BLyS (1D6)
- D200-4 FITC labeled Anti-Human BAFF/BLyS (1D6)
- D201-3 Anti-Human BAFF-R/BR3 (8A7)
- D201-4 FITC labeled Anti-Human BAFF-R/BR3 (8A7)
- K0033-3 Anti-DR3 (B65)
- K0033-4 FITC labeled Anti-DR3 (B65)
- K0039-3 Anti-TNFR1 (H398)
- K0039-4 FITC labeled Anti-TNFR1 (H398)
- K0040-3 Anti-TNFR2 (80M2)
- K0040-4 FITC labeled Anti-TNFR2 (80M2)
- K0127-3 Anti-Daxx (DAXX-01)
- K0145-3 Anti-CD30 (Ber-H2)
- K0145-4 FITC labeled Anti-CD30 (Ber-H2)
- K0151-3 Anti-Bax (5B7)
- K0152-3 Anti-Bax (6A7)
- K0153-3 Anti-Bcl-xL (2H12)
- K0154-3 Anti-Bcl-2 (10C4)
- K0157-3 Anti-IKK γ (I- κ B Kinase γ) (DA10-12)
- K0159-3 Anti-IKK γ (I- κ B Kinase γ) (EA2-6)
- K0194-3 Anti-HtrA2/Omi (18-1-83)
- CM001-1 Anti-Cytochrome c (1E4)
- PM004 Anti-Smac/DIABLO (Polyclonal)
- PD005 Anti-Vimentin Fragment (V1) (Polyclonal)
- PD006 Anti-SET β (p41/p42) (Polyclonal)
- PD007 Anti-SET β (p42) (Polyclonal)
- PD008 Anti-SET β (p41) (Polyclonal)
- 591 Anti-Bad (Polyclonal)
- 592 Anti-Mouse TRAF2 (Polyclonal)
- 597 Anti-Mouse TRAF6 (Polyclonal)
- 4690 APOPCYTO Annexin V-Azami-Green Apoptosis Detection Kit
- 4700 MEBCYTO Apoptosis Kit
- 8445 MEBSTAIN Apoptosis TUNEL Kit Direct
- 8441 MEBSTAIN Apoptosis TUNEL Kit II
- 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
- 4817 Intracellular Caspase-3 Activity Detection Kit
- 4822 Intracellular Caspase-8 Activity Detection Kit
- 4827 Intracellular Caspase-9 Activity Detection Kit
- 4830 APOPCYTO Intracellular Caspases Activity Detection Kit