

Product Information

Catalog Number: 14-5863

Contents: Affinity Purified anti-mouse/rat MULT-1 (NKG2D Ligand)

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Sizes: 50 ug, 100 ug

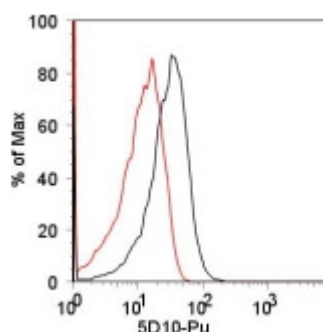
Formulation: Phosphate buffered saline, pH 7.2, less than or equal to 0.09% NaN₃

Storage Conditions: Store at 4°C.

Avoid repeated freeze/thaw cycles.

Clone: 5D10

Isotype: Armenian Hamster IgG1



Staining of the A20 cell line with 0.5 µg of Purified Armenian Hamster IgG Iso Cntrl (cat. 14-4888) (red line) or 0.5 µg of Purified anti-mouse/rat MULT-1 (5D10) (black line) followed by PE anti-Armenian Hamster IgG (cat. 12-4112). Total viable cells were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-5863	Phycoerythrin (PE) anti-mouse/rat MULT-1 (NKG2D Ligand)	488	575	FC
14-5863	Affinity Purified anti-mouse/rat MULT-1 (NKG2D Ligand)	N/A	N/A	FA FC IHC(Paraffin)

Description

The 5D10 monoclonal antibody reacts with the murine MULT-1 (Murine ULBP-Like Transcript 1). MULT-1 is a type I transmembrane protein with two Ig-like domain and is one of the known murine NKG2-D ligands that include RAE1 molecules (alpha, beta, epsilon, gamma and delta) and H60. MULT-1 is a high affinity ligand for NKG2D. Expression of NKG2-D ligands is low or absent on normal adult tissues. However, stressed or transformed cells express NKG2-D ligand and can activate NK cell tumoricidal activity. Until now, the expression of NKG2-D ligands has been mainly studied with NKG2-D tetramers recognizing all NKG2-D ligands.

Applications Reported

For research use only, not for diagnostic or therapeutic use. This 5D10 antibody has been reported for use in flow cytometric analysis, and immunohistology staining of paraffin embedded tissue sections.

Applications Tested

This 5D10 antibody has been tested by flow cytometric analysis of the A20 cell line. This can be used at less than or equal to 0.5 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Bui JD, Carayannopoulos LN, Lanier LL, Yokoyama WM, Schreiber RD. IFN-dependent down-regulation of the NKG2D ligand H60 on tumors. *J Immunol.* 2006 Jan 15;176(2):905-13.

Bahram S, Inoko H, Shiina T, Radosavljevic M. MIC and other NKG2D ligands: from none to too many. *Curr Opin Immunol.* 2005 Oct;17(5):505-9.

Krmpotic A, Hasan M, Loewendorf A, Saulig T, Halenius A, Lenac T, Polic B, Bubic I, Kriegeskorte A, Pernjak-Pugel E, Messerle M, Hengel H, Busch DH, Koszinowski UH, Jonjic S. NK cell activation through the NKG2D ligand MULT-1 is selectively prevented by the glycoprotein encoded by mouse cytomegalovirus gene m145. *J Exp Med.* 2005 Jan 17;201(2):211-20. Epub 2005 Jan 10.

Diefenbach A, Jamieson AM, Liu SD, Shastri N, Raulet DH. Ligands for the murine NKG2D receptor: expression by tumor cells and activation of NK cells and macrophages. *Nat Immunol.* 2000 Aug;1(2):119-26.

Related Products

Cat. 12-4112 Phycoerythrin (PE) anti-Armenian Hamster IgG (clone Polyclonal)

Cat. 14-4888 Affinity Purified Armenian Hamster IgG Isotype Control (clone eBio299Arm)