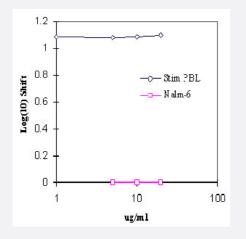
KLRD1 monoclonal antibody, clone HP-3D9

Catalog # MAB6947 Size 100 ug

Applications



Flow Cytometry

Ficoll prepared human peripheral white blood cells were stimulated by incubating 1 day at 5 x 106 cells/mL in RPMI 10% FBS media including 5 ug/mL Phytohemagglutinin-P. 5 X 105 cells per tube were then washed and incubated 45 minutes on ice with 80 uL of KLRD1 monoclonal antibody, clone HP-3D9 (Cat # MAB6947) at a concentration of 20 ug/mL. Cells were washed twice and incubated with 20reagent Goat anti-Mouse IgG/FITC, after which they were washed three times, fixed and analyzed by FACS. A net 40% population of the cells stained positive with a mean shift of 1.10 log10 fluorescent units when compared to a Mouse IgG1 negative control at a similar concentration.

Specification

Product Description	Mouse monoclonal antibody raised against native KLRD1.
Immunogen	Native purified KLRD1 from cultured human NK cells .
Host	Mouse
Reactivity	Human
Form	Liquid
Isotype	lgG1
Recommend Usage	The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM sodium phosphate buffer, 100 mM potassium Chloride, 150 mM NaCl, pH 7.5 (0.5 mg/mL gentamicin sulfate)
Storage Instruction	Store at 4°C.

Applications

Flow Cytometry

Ficoll prepared human peripheral white blood cells were stimulated by incubating 1 day at 5 x 10⁶ cells/mL in RPMI 10% FBS media including 5 ug/mL Phytohemagglutinin-P. 5 X 10⁵ cells per tube were then washed and incubated 45 minutes on ice with 80 uL of KLRD1 monoclonal antibody, clone HP-3D9 (Cat # MAB6947) at a concentration of 20 ug/mL. Cells were washed twice and incubated with 20reagent Goat anti-Mouse IgG/FITC, after which they were washed three times, fixed and analyzed by FACS. A net 40% population of the cells stained positive with a mean shift of 1.10 log10 fluorescent units when compared to a Mouse IgG1 negative control at a similar concentration.

Gene Info — KLRD1	
Entrez GenelD	3824
Gene Name	KLRD1
Gene Alias	CD94
Gene Description	killer cell lectin-like receptor subfamily D, member 1
Omim ID	<u>602894</u>
Gene Ontology	Hyperlink
Gene Summary	Natural killer (NK) cells are a distinct lineage of lymphocytes that mediate cytotoxic activity and se crete cytokines upon immune stimulation. Several genes of the C-type lectin superfamily, includin g members of the NKG2 family, are expressed by NK cells and may be involved in the regulation of NK cell function. KLRD1 (CD94) is an antigen preferentially expressed on NK cells and is class ified as a type II membrane protein because it has an external C terminus. Three transcript variant s encoding two different isoforms have been found for this gene. [provided by RefSeq
Other Designations	CD94 antigen

Publication Reference

• <u>Molecular characterization of human CD94: a type II membrane glycoprotein related to the C-type lectin</u> <u>superfamily.</u>

Chang C, Rodriguez A, Carretero M, Lopez-Botet M, Phillips JH, Lanier LL.

European Journal of Immunology 1995 Sep; 25(9):2433.

Application: Flow Cyt, Mouse, Murine P815 mastocytoma cells



Product Information

 <u>Human natural killer cell receptors for HLA-class I molecules. Evidence that the Kp43 (CD94) molecule</u> functions as receptor for HLA-B alleles.

Moretta A, Vitale M, Sivori S, Bottino C, Morelli L, Augugliaro R, Barbaresi M, Pende D, Ciccone E, Lopez-Botet M, Moretta L. The Journal of Experimental Medicine 1994 Aug; 180(2):545.

Application: Flow Cyt, Func, Human, Human natural killer cells

A novel functional cell surface dimer (Kp43) expressed by natural killer cells and T cell receptor-gamma/delta+ <u>T lymphocytes</u>. I. Inhibition of the IL-2-dependent proliferation by anti-Kp43 monoclonal antibody.

Aramburu J, Balboa MA, Ramirez A, Silva A, Acevedo A, Sanchez-Madrid F, De Landazuri MO, Lopez-Botet M. Journal of Immunology 1990 Apr; 144(8):3238.

Application: Flow Cyt, Func, IP, Human, Human PBL, Nature killer cells

Pathway

- Antigen processing and presentation
- Graft-versus-host disease
- Natural killer cell mediated cytotoxicity

Disease

- Arthritis
- Genetic Predisposition to Disease
- Hepatitis B
- Lupus Erythematosus