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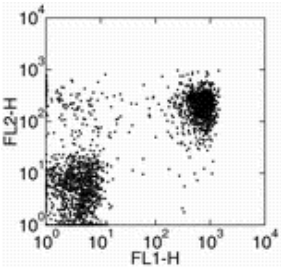
Anti-Human CD314 (NKG2D) PE

Catalog Number: 12-5879
Also Known As:KLRK1
RUO: For Research Use Only



Staining of normal human peripheral blood with Anti-Human CD314 (NKG2D) Biotin, followed by Streptavidin PE and Anti-Human CD8a FITC. CD3+ cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD314 (NKG2D) PE
REF **Catalog Number:** 12-5879
Clone: 5C6
Concentration: 5 uL (0.25 ug)/test
Host/Isotype: Mouse IgG2a

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The 5C6 monoclonal antibody reacts with the human NKG2D, a 42 kDa lectin-like molecule expressed by NK cells, γδ T cells, some $CD4^+$ and $CD8^+$ T cells. Human NKG2D forms complexes with DAP10, a membrane adaptor protein, and has the ability to costimulate multiple NK activation receptors. The counter-receptor for human NKG2D has been identified as MICA/MICB expressed on epithelial tumors from lung, breast, kidney, ovary, prostate and colon carcinoma. 5C6 and 1D11 block binding of soluble MICA to γδ TCR T cell clones and inhibit lysis by these cells. 5C6 and 1D11 induced NKG2D function of redirected lysis of FcReceptor bearing P815 cells.

Applications Reported

The 5C6 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 5C6 antibody has been pre-titrated and tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at 20 µl (0.25 µg)/per test. A test is defined as the amount (µg)/test of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

References

Veronika Groh, Alexander Steinle, Stefan Bauer, and Thomas Spies. 1998. Recognition of Stress-Induced MHC Molecules by Intestinal Epithelial T Cells. Science. 279:1737-1740.

Stefan Bauer, Veronika Groh, Jun Wu, Alexander Steinle, Joseph H. Phillips, Lewis L. Lanier, and Thomas Spies. 1999. Activation of NK Cells and T Cells by NKG2D, a Receptor for Stress-Inducible MICA. Science. 285: 727-729.

Seiler M, Brabcova I, Viklicky O, Hribova P, Rosenberger C, Pratschke J, Lodererova A, Matz M, Schönemann C, Reinke P, Volk HD, Kotsch K. Heightened expression of the cytotoxicity receptor NKG2D correlates with acute and chronic nephropathy after kidney transplantation. Am J Transplant. 2007 Feb;7(2). (5c6, IH/F, PubMed)

Related Products

12-4724 Mouse IgG2a K Isotype Control PE
16-5878 Anti-Human CD314 (NKG2D) Functional Grade Purified (1D11)