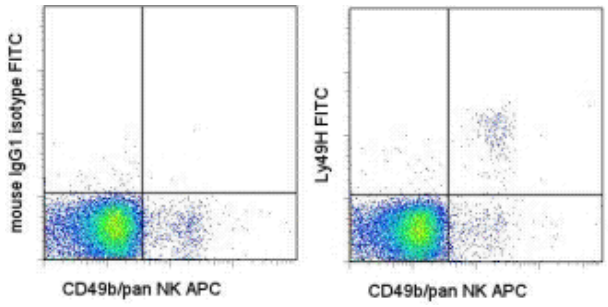
Anti-Mouse Ly-49H FITC

Catalog Number: 11-5886

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



Staining of C57BL/6 splenocytes with Anti-Mouse CD49b (Integrin alpha 2) APC (cat. 17-5971) and 0.25 ug of Mouse IgG1 kappa Isotype Control FITC (cat. 11-4714) (left) or 0.25 ug of Anti-Mouse Ly-49H FITC (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse Ly-49H FITC

REF **Catalog Number:** 11-5886

Clone: 3D10

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG1, kappa

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

Description

The monoclonal antibody 3D10 recognizes Ly-49H, a member of the C-type lectin Ly-49 multigene family of receptors found on natural killer cells. Ly-49H, like Ly-49D, lacks the characteristic ITIM (immunoreceptor tyrosine-based inhibitory motif) and contains an arginine in the transmembrane domain implying these molecules act as activation receptors. Ly-49H is expressed in a subset of NK cells but not NKT (NK1.1CD3+) cells. Natural killer cells can express several Ly-49 proteins. It has been shown that there is preferential staining of Ly-49H with Ly-49D (cat 12-5783). Expression has been confirmed on C57BL/6 and NWNA but not Balb/c or DBA/2 mice. Other mice strains have not been tested. No crossreactivity to Ly-49A, C, D or G2 has been observed. Addition of monoclonal antibody 3D10 to cell cultures induces lysis of target cells.

Applications Reported

This 3D10 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 3D10 antibody has been tested by fow cytometric analyis of C57Bl/6 splenocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Caraux A, Kim N, Bell SE, Zompi S, Ranson T, Lesjean-Pottier S, Garcia-Ojeda ME, Turner M, Colucci F. Phospholipase C-gamma2 is essential for NK cell cytotoxicity and innate immunity to malignant and virally infected cells. Blood. 2006 Feb 1;107(3):994-1002. (3D10, FC PubMed)

Brown MG, Dokun AO, Heusel JW, Smith HR, Beckman DL, Blattenberger EA, Dubbelde CE, Stone LR, Scalzo AA, Yokoyama WM. Vital involvement of a natural killer cell activation receptor in resistance to viral infection. Science. 2001 May 4;292(5518):934-7. (3D10, FA PubMed)

Smith HR, Chuang HH, Wang LL, Salcedo M, Heusel JW, Yokoyama WM. Nonstochastic coexpression of activation receptors on murine natural killer cells. J Exp Med. 2000 Apr 17;191(8):1341-54. (3D10, FC, IP, FA, PubMed)

Related Products

11-4714 Mouse IgG1 K Isotype Control FITC (P3.6.2.8.1)
17-5971 Anti-Mouse CD49b (Integrin alpha 2) APC (DX5)