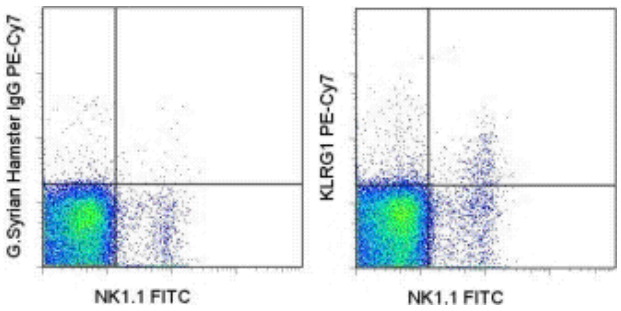
Anti-Mouse KLRG1 PE-Cyanine7

Catalog Number: 25-5893
Also Known As: MAFA
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57BL/6 splenocytes with Anti-Mouse NK1.1 FITC (cat. 11-5941) and 0.125 ug of Golden Syrian Hamster IgG Isotype Control PE-Cyanine7 (cat. 25-4914) (left) or 0.125 ug of Anti-Mouse KLRG1 PE-Cyanine7 (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse KLRG1 PE-Cyanine7
REF **Catalog Number:** 25-5893
Clone: 2F1
Concentration: 0.2 mg/mL
Host/Isotype: Golden Syrian Hamster IgG

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. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Contains sodium azide

Description

This 2F1 monoclonal antibody reacts with the mouse Killer cell Lectin-like Receptor G1 (KLRG1), also known as Mast cell Function-associated Antigen (MAFA). KLRG1 is a homodimer of glycosylated 30-38 kDa subunits and contains a cytoplasmic motif similar to the immunoreceptor tyrosine-based inhibitory motif (ITIM). Rat MAFA was identified as an antigen specific to rat mast cells; however, the expression of mouse KLRG1/MAFA using 2F1 has not been detected on the surface of mouse mast cell lines, bone marrow-derived mast cells, or peritoneal mast cells. This antigen is expressed on approximately one-third of mouse NK cells and a subset of T cells. MHC class I molecules regulate KLRG1 via interactions with class I-specific inhibitory Ly49 molecules and SHP-1 signaling. Although KLRG1 and Ly49 are both lectin-like inhibitory receptors that are regulated by class I MHC expression, the effects of this on cell surface expression of these molecules are opposing, and the underlying regulatory mechanisms distinct.

Applications Reported

This 2F1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 2F1 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 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.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

References

Voehringer D, Blaser C, Brawand P, Raulet DH, Hanke T, Pircher H. 2001. Viral infections induce abundant numbers of senescent CD8 T cells. J Immunol. 167:4838-43

Beyersdorf NB, Ding X, Karp K, Hanke T. 2001. Expression of inhibitory "killer cell lectin-like receptor G1" identifies unique subpopulations of effector and memory CD8 T cells. Eur J Immunol. 31:3443-52

Corral L, Hanke T, Vance RE, Cado D, Raulet DH. 2000. NK cell expression of the killer cell lectin-like receptor G1 (KLRG1), the mouse homolog of MAFA, is modulated by MHC class I molecules. Eur J Immunol. 30:920-30

Related Products

11-0031 Anti-Mouse CD3e FITC (145-2C11)
11-5941 Anti-Mouse NK1.1 FITC (PK136)
25-4914 Golden Syrian Hamster IgG Isotype Control PE-Cyanine7 (n/a)
50-3351 Anti-Mouse CD335 (NKp46) eFluor® 660 (Alexa Fluor 647 Replacement) (29A1.4)

Legal

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