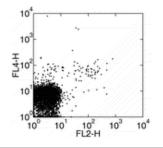


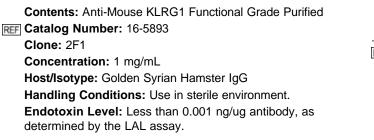
# Anti-Mouse KLRG1 Functional Grade Purified

Catalog Number: 16-5893 Also Known As:MAFA RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of mouse splenocytes with Anti-Mouse NK1.1 APC and Anti-Mouse KLRG1 Biotin followed by Streptavidin PE. Total viable cells were used for analysis.

## **Product Information**



**Formulation:** aqueous buffer, no sodium azide **Temperature Limitation:** Store at 2-8°C.

Batch Code: Refer to Vial Use By: Refer to Vial

### Description

This 2F1 monoclonal antibody reacts with the mouse Killer cell Lectin-like Receptor G1 (KLRG1), also known as Mast cell Functionassociated 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**

2F1 has been reported for use in flow cytometric analysis and functional assays.

## **Applications Tested**

The 2F1 antibody has been tested by flow cytometric analysis of mouse splenocyte cell suspensions. This can be used at less than or equal to 1  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

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

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

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**

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