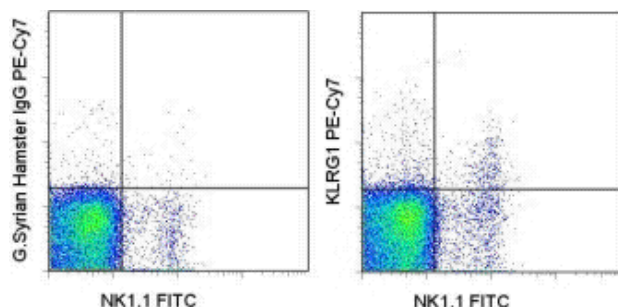


## Anti-Mouse KLRG1 PE-Cyanine7

**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.



**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<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.

**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**

FOR NON-COMMERCIAL RESEARCH USE ONLY. NOT FOR THERAPEUTIC OR IN VIVO APPLICATIONS. OTHER USE NEEDS LICENSE FROM GE HEALTHCARE BIO-SCIENCES CORP. UNDER U.S. PATENT FOR NON-COMMERCIAL RESEARCH USE ONLY. NOT FOR THERAPEUTIC OR IN VIVO APPLICATIONS. OTHER USE NEEDS LICENSE FROM GE HEALTHCARE BIO-SCIENCES CORP. UNDER U.S. PATENT # 5,268,486, 5,569,587 AND 5,627,027 AND FOREIGN EQUIVALENTS AND PENDING APPLICATIONS. THIS MATERIAL IS SUBJECT TO PROPRIETARY RIGHTS OF GE HEALTHCARE BIO-SCIENCES CORP. AND CARNEGIE MELLON UNIVERSITY AND MADE AND SOLD UNDER LICENSE FROM GE HEALTHCARE BIO-SCIENCES CORP. THIS PRODUCT IS LICENSED FOR SALE ONLY FOR RESEARCH. IT IS NOT LICENSED FOR ANY OTHER USE. THERE IS NO IMPLIED LICENSE HEREUNDER FOR ANY COMMERCIAL USE. COMMERCIAL USE shall include: 1. sale, lease, license or other transfer of the material or any material derived or produced from it; 2. sale, lease, license or other grant of rights to use this Material or any material derived or produced from it; 3. use of this material to perform services for a fee for third parties. IF YOU REQUIRE A COMMERCIAL LICENSE TO USE THIS MATERIAL AND DO NOT HAVE ONE, RETURN THIS MATERIAL, UNOPENED TO EBIOSCIENCE, INC. 10255 SCIENCE CENTER DRIVE, SAN DIEGO, CALIFORNIA 92121 USA AND ANY MONEY PAID FOR THE MATERIAL WILL BE REFUNDED.

---

Not for further distribution without written consent.

Copyright © 2000-2012 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • [www.eBioscience.com](http://www.eBioscience.com) • [info@eBioscience.com](mailto:info@eBioscience.com)