

# KLRG1 Monoclonal Antibody (2F1), Super Bright™ 702, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Syrian hamster / IgG
Class	Monoclonal
Type	Antibody
Clone	2F1
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762668

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	9 Publications
Functional Assay (FN)	-	1 Publication

## Product Specific Information

**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 may be used at less than or equal to 1 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.

Super Bright 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet

for Super Bright Staining Buffer for more information.

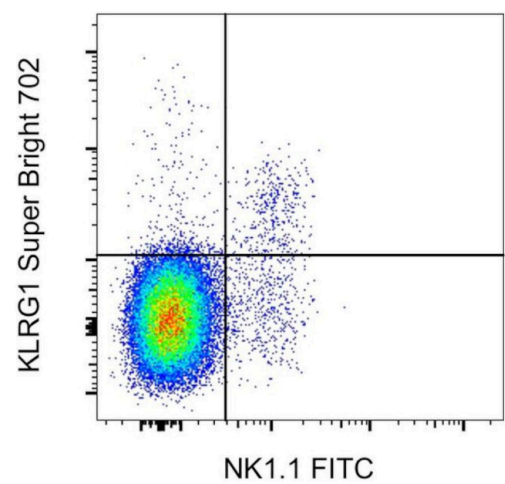
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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.

Excitation: 405 nm; Emission: 702 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

**Product Images For KLRG1 Monoclonal Antibody (2F1), Super Bright™ 702, eBioscience™**



**KLRG1 Antibody (67-5893-82) in Flow**  
C57BL/6 mouse splenocytes were stained with NK1.1 Monoclonal Antibody, FITC (Product # 11-5941-82) and 0.5 µg of KLRG1 Monoclonal Antibody, Super Bright 702. Total viable cells were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

[View more figures on thermofisher.com](#)

Flow Cytometry (9)

<p>Advanced science (Weinheim, Baden-Wurttemberg, Germany)</p> <p><b>Group 2 Innate Lymphoid Cells Protect Mice from Abdominal Aortic Aneurysm Formation via IL5 and Eosinophils.</b></p> <p>"Published figure using KLRG1 monoclonal antibody (Product # 67-5893-82) in Flow Cytometry"</p> <p>Authors: Zhang Y,Liu T,Deng Z,Fang W,Zhang X,Zhang S,Wang M,Luo S,Meng Z,Liu J,Sukhova GK,Li D,McKenzie ANJ,Libby P,Shi GP,Guo J</p>	<p>Year 2023</p>
<p>Nature communications</p> <p><b>Maturation and specialization of group 2 innate lymphoid cells through the lung-gut axis.</b></p> <p>"Published figure using KLRG1 monoclonal antibody (Product # 67-5893-82) in Flow Cytometry"</p> <p>Authors: Zhao M,Shao F,Yu D,Zhang J,Liu Z,Ma J,Xia P,Wang S</p>	<p>Year 2022</p>

[View more Flow references on thermofisher.com](#)

Functional Assay (1)

<p>The Journal of cell biology</p> <p><b>Cancer cells educate natural killer cells to a metastasis-promoting cell state.</b></p> <p>"Published figure using KLRG1 monoclonal antibody (Product # 67-5893-82) in Functional Assay"</p> <p>Authors: Chan IS,Knútsdóttir H,Ramakrishnan G,Padmanaban V,Warrier M,Ramirez JC,Dunworth M,Zhang H,Jaffee EM,Bader JS,Ewald AJ</p>	<p>Year 2020</p>
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