

KLRG1 Monoclonal Antibody (2F1), Super Bright™ 436, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Syrian hamster / IgG
Class	Monoclonal
Type	Antibody
Clone	2F1
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 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_2735063

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 spleen cells. This can be used at less than or equal to 1.0 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

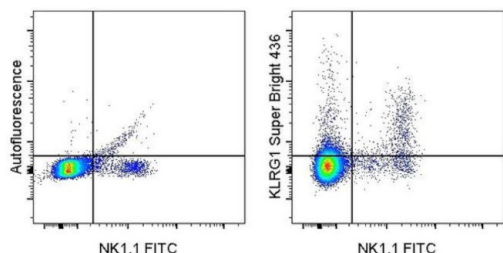
When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet

for Super Bright Staining Buffer for more information.

Excitation: 405 nm; Emission: 436 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™ 436, eBioscience™



KLRG1 Antibody (62-5893-82) in Flow

C57BL/6 mouse splenocytes were stained with NK1.1 Monoclonal Antibody, FITC (Product # 11-5941-82) and staining buffer (autofluorescence) (left) or 0.5 µg of KLRG1 Monoclonal Antibody, Super Bright 436 (right). Cells in the lymphocyte gate were used for analysis.

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

10 References

Flow Cytometry (9)

Advanced science (Weinheim, Baden-Wurttemberg, Germany)

Group 2 Innate Lymphoid Cells Protect Mice from Abdominal Aortic Aneurysm Formation via IL5 and Eosinophils.

"Published figure using KLRG1 monoclonal antibody (Product # 62-5893-82) in Flow Cytometry"

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

Year
2023

Nature communications

Maturation and specialization of group 2 innate lymphoid cells through the lung-gut axis.

"Published figure using KLRG1 monoclonal antibody (Product # 62-5893-82) in Flow Cytometry"

Authors: Zhao M, Shao F, Yu D, Zhang J, Liu Z, Ma J, Xia P, Wang S

Year
2022

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

Functional Assay (1)

The Journal of cell biology

Cancer cells educate natural killer cells to a metastasis-promoting cell state.

"Published figure using KLRG1 monoclonal antibody (Product # 62-5893-82) in Functional Assay"

Authors: Chan IS, Knútsdóttir H, Ramakrishnan G, Padmanaban V, Warriar M, Ramirez JC, Dunworth M, Zhang H, Jaffee EM, Bader JS, Ewald AJ

Year
2020

More applications with references on thermofisher.com

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