

KLRG1 Monoclonal Antibody (2F1), Alexa Fluor™ 488, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Syrian hamster / IgG
Recommended Isotype Control	Syrian Hamster IgG Isotype Control, Alexa Fluor™ 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2F1
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2744752

Applications	Tested Dilution	Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	10 Publications
Functional Assay (FN)	-	1 Publication

Product Specific Information

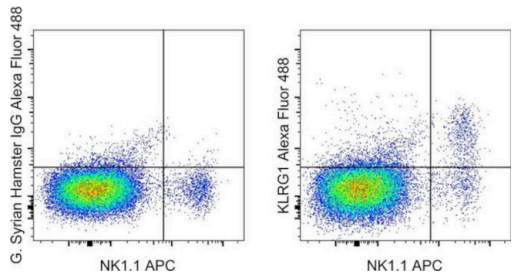
Description: This 2F1 monoclonal antibody reacts with the mouse Killer cell Lectin-like Receptor G1 (KLRG1), also known as Mast cell Function-associated Antigen (MAFA). KLRG1 is a homodimer of glycosylated 30-38 kDa subunits and contains a cytoplasmic motif similar to the immunoreceptor tyrosine-based 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 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488 nm; Emission: 519 nm; Laser: Blue Laser

Product Images For KLRG1 Monoclonal Antibody (2F1), Alexa Fluor™ 488, eBioscience™



KLRG1 Antibody (53-5893-82) in Flow
C57BL/6 mouse splenocytes were stained with NK1.1 Monoclonal Antibody, APC (Product # 17-5941-82) and 0.125 µg of Golden Syrian Hamster IgG Isotype Control, Alexa Fluor 488 (Product # 53-4914-82) (left) or 0.125 µg of KLRG1 Monoclonal Antibody, Alexa Fluor 488 (right). Total viable cells were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

View more figures on thermofisher.cn

Immunohistochemistry (PFA fixed) (1)

<p>Nature communications</p> <p>Mitochondrial transcription factor A in RORt⁺ lymphocytes regulate small intestine homeostasis and metabolism.</p> <p>"53-5893-82 was used in Immunohistochemistry (PFA fixed) to show that IL-22, a cytokine produced by RORt⁺ lymphocytes inhibits IL-13-induced tuft cell differentiation in vitro, and suppresses the tuft cell-type 2 immune circuit and small intestine lengthening in vivo, highlighting its key role in gut tissue remodeling."</p> <p>Authors: Fu Z,Dean JW,Xiong L,Dougherty MW,Oliff KN,Chen ZE,Jobin C,Garrett TJ,Zhou L</p>	<p>Year 2021</p> <p>Species Mouse</p> <p>Dilution 1:200</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------

Flow Cytometry (10)

<p>Advanced science (Weinheim, Baden-Wurttemberg, Germany)</p> <p>Group 2 Innate Lymphoid Cells Protect Mice from Abdominal Aortic Aneurysm Formation via IL5 and Eosinophils.</p> <p>"Published figure using KLRG1 monoclonal antibody (Product # 53-5893-82) 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>Maturation and specialization of group 2 innate lymphoid cells through the lung-gut axis.</p> <p>"Published figure using KLRG1 monoclonal antibody (Product # 53-5893-82) 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.cn](#)

Functional Assay (1)

<p>The Journal of cell biology</p> <p>Cancer cells educate natural killer cells to a metastasis-promoting cell state.</p> <p>"Published figure using KLRG1 monoclonal antibody (Product # 53-5893-82) 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>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------

More applications with references on thermofisher.cn

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.