

# KLRG1 (2F1): sc-32755

## BACKGROUND

Killer cell lectin-like receptor G1 (KLRG1) is expressed as a homodimer, composed of glycosylated 30-38 kDa subunits, on natural killer (NK) cells and activated CD8 T cells. KLRG1 expression is tightly regulated and is induced through different molecular mechanisms in varying subsets of immune-responsive cells. Induction of the receptor leads to inhibition of NK cell-mediated cytotoxicity and cytokine production, indicating a role for KLRG1 in the termination of NK cell activation. A rat homologue of KLRG1, designated mast cell function-associated antigen (MAFA), was originally isolated from the RBL-2H3 cell line. MAFA is expressed in rat mast cells and basophils.

## REFERENCES

1. Corral, L., Hanke, T., Vance, R.E., Cado, D. and Raulet, D.H. 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: 920-930.
2. Voehringer, D., Kaufmann, M. and Pircher, H. 2001. Genomic structure, alternative splicing, and physical mapping of the killer cell lectin-like receptor G1 gene (KLRG1), the mouse homologue of MAFA. *Immunogenetics* 52: 206-211.
3. Robbins, S.H., Nguyen, K.B., Takahashi, N., Mikayama, T., Biron, C.A. and Brossay, L. 2002. Cutting edge: inhibitory functions of the killer cell lectin-like receptor G1 molecule during the activation of mouse NK cells. *J. Immunol.* 168: 2585-2589.
4. Abramson, J. and Pecht, I. 2002. Clustering the mast cell function-associated antigen (MAFA) leads to tyrosine phosphorylation of p62Dok and SHIP and affects RBL-2H3 cell cycle. *Immunol. Lett.* 82: 23-28.
5. Robbins, S.H., Terrizzi, S.C., Sydora, B.C., Mikayama, T. and Brossay, L. 2003. Differential regulation of killer cell lectin-like receptor G1 expression on T cells. *J. Immunol.* 170: 5876-5885.

## CHROMOSOMAL LOCATION

Genetic locus: *Klrp1* (mouse) mapping to 6 F1.

## SOURCE

KLRG1 (2F1) is a Syrian hamster monoclonal antibody raised against IL-2-activated NK cells (A-LAK) from C57BL/6 mice.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for biological studies, sc-32755 L, 200 µg/0.1 ml.

KLRG1 (2F1) is available conjugated to agarose (sc-32755 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-32755 PE), fluorescein (sc-32755 FITC), Alexa Fluor® 488 (sc-32755 AF488), Alexa Fluor® 546 (sc-32755 AF546), Alexa Fluor® 594 (sc-32755 AF594) or Alexa Fluor® 647 (sc-32755 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-32755 AF680) or Alexa Fluor® 790 (sc-32755 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

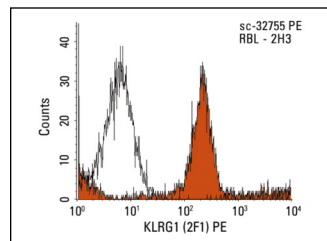
KLRG1 (2F1) is recommended for detection of KLRG1 of mouse and rat origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for KLRG1 siRNA (m): sc-42938, KLRG1 shRNA Plasmid (m): sc-42938-SH and KLRG1 shRNA (m) Lentiviral Particles: sc-42938-V.

Molecular Weight of KLRG1: 30-38 kDa.

Positive Controls: mouse spleen extract: sc-2391.

## DATA



KLRG1 (2F1) PE: sc-32755 PE. FCM analysis of RBL-2H3 cells. Black line histogram represents the isotype control, normal Syrian hamster IgG.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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