



## CELL LAB Hamster Anti-Mouse KLRG1

Cat. No.	Form	Quantity
732295	Purified (UNLB) Antibody	0.5 mg
732296	Fluorescein (FITC) Conjugate	0.5 mg
732297	Biotin (BIOT) Conjugate	0.5 mg
732298	Phycoerythrin (PE) Conjugate	0.1 mg

### For Laboratory Use Only

#### DESCRIPTION

**Clone:** 2F1  
**Isotype:** Syrian Hamster IgG  
**Immunogen:** Activated NK (A-LAK) cells from B6 (H-2b) mice<sup>1</sup>  
**Specificity:** KLRG1 (Mr 30-38 kDa)

Monoclonal antibody (MAb) 2F1 reacts with mouse killer cell lectin-like receptor G1 (KLRG1; formerly known as mouse MAFA or 2F1-Ag),<sup>1,2</sup> a homodimeric member of the lectin-like type 2 transmembrane receptor family that contains characteristic immunoreceptor tyrosine-based inhibitory motifs (ITIMs) in their cytoplasmic domains. These ITIMs interact with the SH2 domains of protein phosphatases such as SHP-1.<sup>3,4</sup> The 2F1 antibody stains 30-60% of NK1.1<sup>+</sup>CD3<sup>-</sup> splenocytes, and a small fraction of T cells in all mouse strains tested (C57BL/6, BALB/c, 129/J, C3H.SW, AKR/J, SJL).<sup>1</sup> Cell surface expression of KLRG1 is up-regulated by expression of MHC class I molecules. The effect of MHC class I expression is indirect, and can be mediated by interactions with class I-specific Ly49 inhibitory receptors.<sup>1</sup>

#### APPLICATIONS

- Flow cytometry<sup>1</sup>
- Immunoprecipitation<sup>1</sup>

#### CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested to conform with characteristics of a standard reference reagent using flow cytometry.

#### WORKING DILUTIONS

**Flow Cytometry:**

Purified antibody	≤1 μg/10 <sup>6</sup> cells
FITC conjugate	≤1 μg/10 <sup>6</sup> cells
BIOT conjugate	≤1 μg/10 <sup>6</sup> cells
PE conjugate	≤0.2 μg/10 <sup>6</sup> cells

**Other Applications:** Since applications vary, determine the optimum working dilution of the product that is appropriate for your specific needs.

#### HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.0. No preservatives or amine-containing buffer salts added.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>.

- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>.
- The phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent.
- Protect fluorochrome-conjugated forms from light. Do not freeze.
- Reagent is stable until the expiration date on the vial when stored at 2-8°C.

## STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Minimize exposure of reagent to light during storage or incubation.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use Good Laboratory Practice (GLP) when handling this reagent.
7. Harmful if swallowed.
8. After contact with skin, wash immediately with plenty of water.
9. Contains sodium azide. Sodium azide under acidic conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, immediately wash excessively with water.

## TRADEMARKS

The Beckman Coulter logo is a trademark of Beckman Coulter, Inc.

For additional information or if damaged product is received, contact your local Beckman Coulter Representative.

## REFERENCES

1. Corral L, Hanke T, Vance RE, Cado D, and 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*, 30:920-930.
2. Hanke T, Corral L, Vance RE, and Raulet DH. 1998. 2F1 antigen, the mouse homolog of the rat "mast cell function-associated antigen", is a lectin-like type II transmembrane receptor expressed by natural killer cells. *Eur J Immunol*, 28:4409-4417.
3. Burshtyn D, Scharenberg A, Wagtmann N, Rajagopalan S, Peruzzi M, Kinet JP, and Long EO. 1997. Recruitment of tyrosine phosphatase HCP by the NK cell inhibitory receptor. *Immunity*, 4:77-85.
4. Nakamura MC, Niemi EC, Fisher MJ, Schultz LD, Seaman E, and Ryan JC. 1997. Mouse Ly-49A interrupts early signaling events in natural killer cell cytotoxicity and functionally associates with the SHP-1 tyrosine phosphatase. *J Exp Med*, 185:673-684.



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