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Technical Data Sheet

Anti-Mouse KLRG1 PE

Catalog Number :82112-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: 2F1

Format/Conjugate: PE

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Blue (488nm), Yellow/Green (532-561nm)

Peak Emission: 578nm

Peak Excitation: 496nm

Filter: 585/40

Brightness (1=dim,5=brightest): 5

Isotype: Golden Syrian Hamster IgG

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC

Description

The 2F1 monoclonal antibody is specific for the mouse Killer cell Lectin-like Receptor G1 (KLRG1), a homodimer consisting of two N-glycosylated subunits of 30-38 kDa, also known as MAFA (Mast cell Function-associated Antigen). The antigen contains a cytoplasmic motif similar to ITIM (the immunoreceptor tyrosine-based inhibitory motif). KLRG1 is a receptor for cadherin, a family of transmembrane glycoproteins that mediate cell adhesion, and a common marker of T cell senescence. The receptor is believed to play an important role in the innate and adaptive immune system through the regulation of leukocytes. It is expressed on lymphokine-activated killer (LAK) cells, adherent LAK (A-LAK) cells, a sub-set of natural killer (NK) cells, T cells. In NK cells, it inhibits cytokine production and cytotoxicity activity.

The receptor expression was not detected on the mouse peritoneal mast cells, or bone marrow mast cells.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze.The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.25 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Beyersdorf, N. B., Ding, X., Karp, K., Hanke, T. (2001). Expression of inhibitory" killer cell lectin-like receptor G1" identifies unique subpopulations of effector and memory CD8 T cells. European journal of immunology,;31(12), 3443-3452.

2. Corral, L., Hanke, T., Vance, R. E., Cado, D., 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.;European journal of immunology,;30(3), 920-930.

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3. Robbins, S. H., Terrizzi, S. C., Sydora, B. C., Mikayama, T., Brossay, L. (2003). Differential regulation of killer cell lectin-like receptor G1 expression on T cells.;The Journal of Immunology,;170(12), 5876-5885.