

Anti-Mouse/Human KLRG-1 – Purified

IVMB0401

Product Information

Product SKU	: IVMB0401
Clone	: 2F1
Isotype	: Syrian Hamster IgG
Size	: 10mg, 25mg
Target	: KLRG-1
Category	: Monoclonal Antibody
Storage	: Sterile 2-8°C
Host	: Syrian Hamster

Product Description

Specificity: 2F1 activity is directed against mouse and human KLRG1.

Antigen Information: KLRG1 is expressed by subsets of natural killer cells and a small fraction of T cells but not by other lymphohematopoietic cells in both mouse and human.

Background: Killer cell lectin-like receptor G1 (KLRG1) is a transmembrane glycoprotein with an extracellular C-type lectin-like domain and a cytoplasmic immunoreceptor tyrosine-based inhibitory motif (ITIM)¹. KLRG1 plays an inhibitory role in human NK and T cells² and is frequently used as a marker of cellular differentiation, with memory cells and highly differentiated end-stage cells having a significantly higher percentage of expression than differentiating cells². Additionally, the proportion of CD8⁺ T cells expressing KLRG1 is age-related, increasing from ~ 40% of the CD8⁺ T cell pool in young adults to 90% in individuals over 65. KLRG1 is known to bind E-, N-, and R-cadherin^{1, 2}. Cadherin interactions are generally involved in cell-to-cell adhesion and additionally, KLRG1/E-cadherin interactions are involved in immune control². 2F1 was generated by immunizing Syrian hamsters with IL-2 activated NK (A-LAK) cells from B6 (H-2^b) mice³. Popliteal lymph node cells were fused to murine myeloma P3X63Ag.8.653 cells and hybridomas screened for antibodies specific to A-LAK cells. Antibody 2F1 was used to show that KLRG1 is indirectly upregulated by expression of MHC class I molecules in an interaction affected by class I-specific Ly49 inhibitory receptors and was also used to show that KLRG1 expression is modulated by SHP-1³. Additionally, 2F1 was used to identify the KLRG1 mouse homolog and show that it is not expressed on mouse mast cells^{4,-11}.

Known Reactivity Species: Human/Mouse

Immunogen : IL-2-activated NK cells (A-LAK cells) from B6 (H-2b) mice

Formulation: This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added.

Purity: -

Endotoxin Level: -