

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human KLRG1 in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2388C
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human KLRG1 Leu60-Phe195 Accession # Q96E93
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>Immunohistochemistry</b>	3-25 µg/mL	See Below
<b>CytoF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

#### DATA

<p><b>Flow Cytometry</b></p> <p><b>Detection of KLRG1 in Human Peripheral Blood by Flow Cytometry.</b> Human peripheral blood was stained with (A) Rabbit anti-Human KLRG1 Monoclonal Antibody (Catalog # MAB70293) or (B) Rabbit IgG control antibody (Catalog # MAB1050) followed by APC-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # F0111) and CD56 PE-conjugated Monoclonal Antibody (Catalog # FAB2408P). View our protocol for <a href="#">Staining Membrane-associated Proteins</a>.</p>	<p><b>Immunohistochemistry</b></p> <p><b>KLRG1 in Human Tonsil.</b> KLRG1 was detected in immersion fixed paraffin-embedded sections of human tonsil using Rabbit Anti-Human KLRG1 Monoclonal Antibody (Catalog # MAB70293) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in lymphocytes. View our protocol for <a href="#">IHC Staining with VisUCyte HRP Polymer Detection Reagents</a>.</p>
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#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

KLRG1 (killer cell lectin-like receptor G1), also called MAFA (mast cell function associated), is a 30-38 kDa type II transmembrane inhibitory glycoprotein of the C-type lectin family, designated CLEC15A. KLRG1 cDNA encodes 195 amino acids (aa) including an intracellular ITIM motif and a 136 aa extracellular domain (ECD) with a single C-type lectin domain. The human KLRG1 ECD shares 57% and 54% aa identity with mouse and rat KLRG1, respectively. A 189 aa isoform diverges at aa 186. KLRG1 binds E-, N- and R-cadherins and functions as an MHC-independent means of identifying non-self pathogens and epithelial tumor cells with low E-cadherin expression. It is expressed as a monomer or disulfide-linked homodimer on NK and T cell subsets such as tumor-infiltrating lymphocytes.