

Human KLRG1 Protein

Cat. No. KLR-HM2G1

Description

Source	Recombinant Human KLRG1 Protein is expressed from HEK293 with hFc tag at the N-Terminus. It contains Leu60-Phe195.
Accession	Q96E93-1
Molecular Weight	The protein has a predicted MW of 42.8 kDa. Due to glycosylation, the protein migrates to 50-65 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

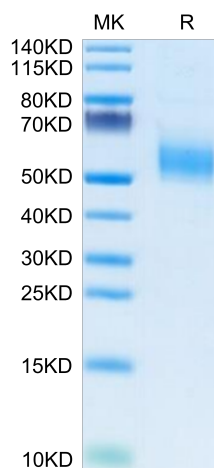
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Immune homeostasis requires the tight, tissue-specific control of the different CD4 Foxp3 regulatory T (Treg) cell populations. The cadherin-binding inhibitory receptor killer cell lectin-like receptor G1 (KLRG1) is expressed by a subpopulation of Treg cells with GATA3 effector phenotype. Lack of KLRG1 on Treg cells conferred on them a competitive advantage in the gut, but not in lymphoid organs. Hence, although absence of KLRG1 is not enough to increase intestinal Treg cells in KLRG1 knockout mice, KLRG1 ligation reduces T-cell receptor signals and the competitive fitness of individual Treg cells in the intestine.

Assay Data

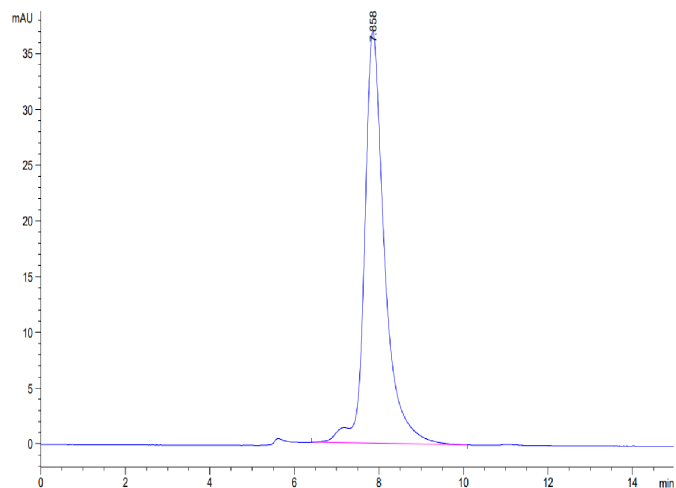
Tris-Bis PAGE



Human KLRG1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

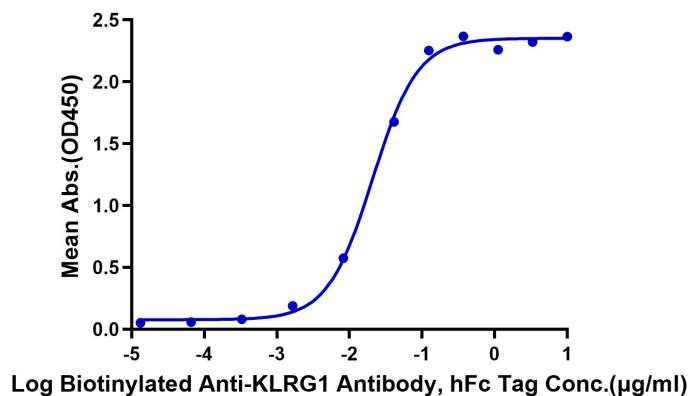
Assay Data



The purity of Human KLRG1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human KLRG1, hFc Tag ELISA
0.05µg Human KLRG1, hFc Tag Per Well



Immobilized Human KLRG1, hFc Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-KLRG1 Antibody, hFc Tag with the EC50 of 20.8ng/ml determined by ELISA.