Human KLRG1 Protein, His Tag (SPR verified)

Catalog # KL1-H5249

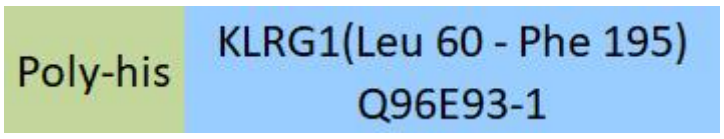
Synonym

KLRG1

Source

Human KLRG1, His Tag(KL1-H5249) is expressed from human 293 cells (HEK293). It contains AA Leu 60 - Phe 195 (Accession # Q96E93-1).
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 17.4 kDa. The protein migrates as 30-42 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

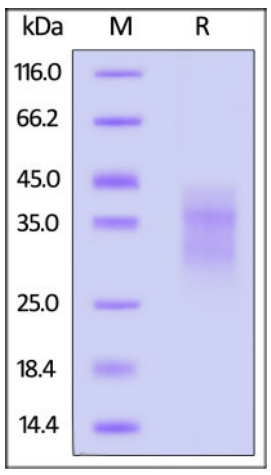
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

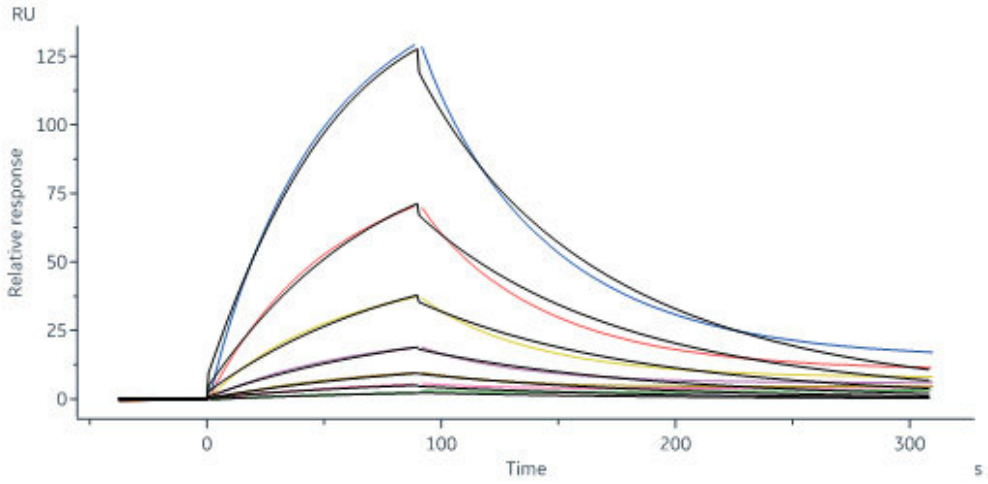
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human KLRG1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-SPR



Human KLRG1, His Tag (Cat. No. KL1-H5249) immobilized on CM5 Chip can bind Human E-Cadherin, Fc Tag, premium grade (Cat. No. ECD-H5250) with an affinity constant of 2.42 μM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

The co-inhibitory receptor killer-cell lectin like receptor G1 (KLRG1) is specifically expressed on NK cells and activated CD8+ T-cells and has been postulated to be a marker of senescence. KLRG1+ T cells are a major reason of chronic tissue damage in some autoimmune diseases such as systemic lupus erythematosus and rheumatoid arthritis. In tumors, tumor cells which express E-cadherin or N-cadherin bind to KLRG1 and inhibit the antitumor activity of T and NK cells. Thus, KLRG1 acts as an immunocheckpoint inhibitory receptor.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.