Human TL1A / TNFSF15 Protein, His Tag (Monomer) (MALS verified)

Catalog # TLA-H5246





Synonym

TL1A, VEGI, TNFSF15

Source

Human TL1A Protein, His Tag (TLA-H5246) is expressed from human 293 cells (HEK293). It contains AA Leu 72- Leu 251 (Accession # O95150-1).

Predicted N-terminus: His

Molecular Characterization



TL1A(Leu 72- Leu 251) O95150-1

Other Tags and Version Biotin & Other Labeled Version

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 22.4 kDa. The protein migrates as 26 kDa and 28-30 kDa when calibrated against <u>Star Ribbon Pre-stained</u> <u>Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Supplied as 0.2 µm filtered solution in PBS, Arginine, pH7.4 with glycerol as protectant. Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

Storage

Please avoid repeated freeze-thaw cycles.

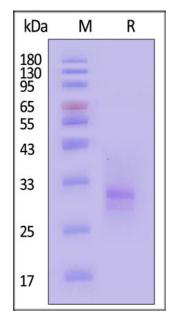
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

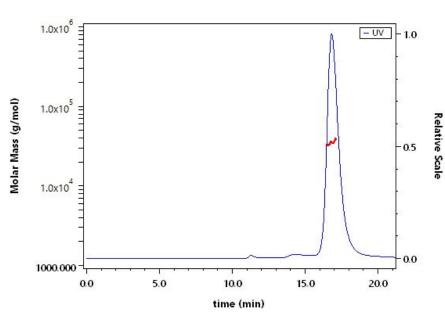
ACRO Quality Management System

- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



SEC-MALS



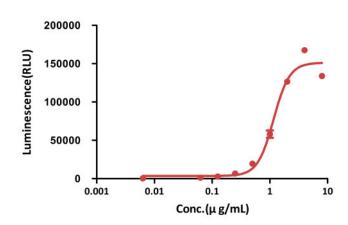
Human TL1A Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% 90% and the molecular weight of this protein is around 25-40 kDa verified by (With <u>Star Ribbon Pre-stained Protein Marker</u>). SEC-MALS.

Bioactivity-ELISA

0.5 μg of Human DcR3, Fc Tag per well Mean Abs. (0D450) 3-EC50= 114.3 ng/mL 2. 10 100 1000 Human TL1A Protein, His Tag Conc. (ng/mL)

Human TL1A Protein, His Tag ELISA

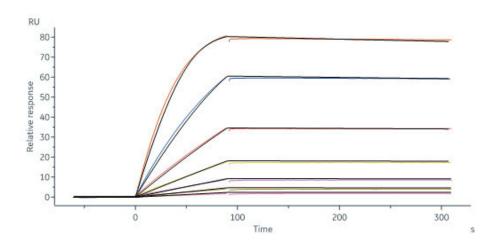
Human TL1A Protein, His Tag induced NF-к В Reporter activity in Jurkat Cell

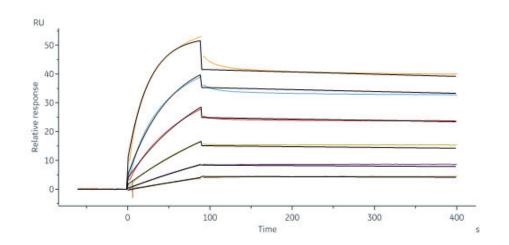


Immobilized Human DcR3, Fc Tag (Cat. No. TNB-H5255) at 5 μg/mL (100 μL/well) can bind Human TL1A Protein, His Tag (Cat. No. TLA-H5246) with a linear range of 8-125 ng/mL (QC tested).

Human TL1A Protein, His Tag (Cat. No. TLA-H5246) induced NF-κB Reporter activity in Jurkat Cell. The EC50 value of this effect is 1.163 µg/mL (Routinely tested).

Bioactivity-SPR





His Tag (Cat. No. TLA-H5246) with an affinity constant of 0.293 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Anti-TL1A antibody captured on Protein A Chip can bind Human TL1A Protein, Human DcR3, Fc Tag (Cat. No. TNB-H5255) captured on Protein A Chip can bind Human TL1A Protein, His Tag (Cat. No. TLA-H5246) with an affinity constant of 0.497 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

TNF-like cytokine 1A (TL1A) and its receptors, death receptor 3 (DR3) and decoy receptor 3 (DcR3) are members of the TNF and TNF receptor superfamilies of proteins, respectively. Binding of APC-derived TL1A to lymphocytic DR3 provides co-stimulatory signals for activated lymphocytes. DR3 signaling affects not only the proliferative activity of and cytokine production by effector lymphocytes, but also critically influences the development and suppressive function of regulatory Tcells. Whereas, DcR3 restricts the function of the TL1A/DR3 complex: attenuating T-cell activation and downregulating the secretion of pro-inflammatory cytokines. Together with DR3 and DcR3, TL1A constitutes a cytokine system that actively interferes with the regulation of immune responses.



