# Human TL1A / TNFSF15 Protein (E120A, E122A, M217A), His Tag (MALS & SPR verified)

Catalog # TLA-H5248



#### Synonym

TL1A, VEGI, TNFSF15

#### Source

Human TL1A Protein (E120A, E122A, M217A), His Tag(TLA-H5248) is expressed from human 293 cells (HEK293). It contains AA Leu 72- Leu 251 (E120A, E122A, M217A) (Accession # <u>095150-1</u> (E120A, E122A, M217A)). Predicted N-terminus: His

# **Molecular Characterization**



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

The protein has a calculated MW of 22.2 kDa. The protein migrates as 27 kDa and 29-31 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

# Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in 0.2 M Arginine, 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

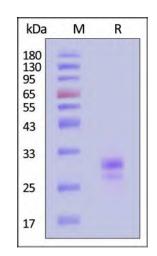
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

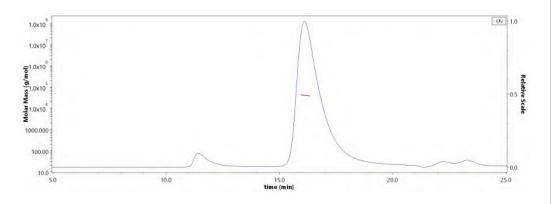
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human TL1A Protein (E120A, E122A, M217A), 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% (With <u>Star Ribbon Pre-stained Protein</u>

# SEC-MALS



The purity of Human TL1A Protein (E120A, E122A, M217A), His Tag (Cat. No. TLA-H5248) is more than 90% and the molecular weight of this protein is around 32-42 kDa verified by SEC-MALS.

Marker).

<u>Report</u>

# **Bioactivity-SPR**

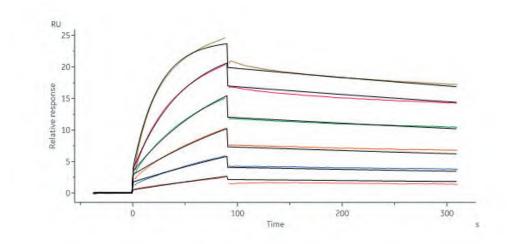


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## Catalog # TLA-H5248





Human TL1A Protein (E120A, E122A, M217A), His Tag (Cat. No. TLA-H5248) immobilized on CM5 Chip can bind Human DcR3, Fc Tag (Cat. No. TNB-H5255) with an affinity constant of 2.36 nM as determined in a SPR assay (Biacore 8K) (QC 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 T-cells. 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.

## **Clinical and Translational Updates**

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



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