# Biotinylated Human GITR Ligand / TNFSF18 Protein, Avitag™,Fc Tag





### Synonym

TNFSF18,AITRL,TL6,hGITRL,GITR Ligand

#### Source

Biotinylated Human GITR Ligand, Avitag,Fc Tag(GIL-H82F8) is expressed from human 293 cells (HEK293). It contains AA Gln 50 - Ser 177 (Accession # AAH69319.1).

Predicted N-terminus: Gly

## **Molecular Characterization**



This protein carries an Avi tag (Avitag<sup>TM</sup>) at the N-terminus, followed by a human IgG1 Fc tag.

The protein has a calculated MW of 43.5 kDa. The protein migrates as 45-53 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Glycine, Arginine and NaCl, pH7.5 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

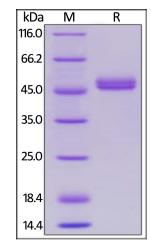
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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**



Biotinylated Human GITR Ligand, Avitag,Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

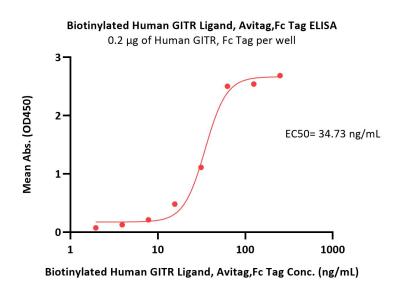
## **Bioactivity-ELISA**



# Biotinylated Human GITR Ligand / TNFSF18 Protein, Avitag™,Fc Tag







Immobilized Human GITR, Fc Tag (Cat. No. GIR-H5254) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human GITR Ligand, Avitag,Fc Tag (Cat. No. GIL-H82F8) with a linear range of 4-63 ng/mL (QC tested).

## Background

Tumor necrosis factor ligand superfamily member 18 (TNFSF18) is also known as Glucocorticoid - induced TNF-related ligand (GITRL or GITR Ligand), Activation - inducible TNF - related ligand (AITRL), which belongs to the tumor necrosis factor family. TNFSF18 is expressed at high levels in the small intestine, ovary, testis, kidney and endothelial cells. TNFSF18 / GITRL is up-regulated after stimulation by bacterial lipopolysaccharides (LPS). TNFSF18 Can function as costimulator and lower the threshold for T-cell activation and T-cell proliferation. TNFSF18 / GITR Ligand is important for interactions between activated T-lymphocytes and endothelial cells. TNFSF18 also mediates activation of NF-kappa-B.

