# Biotinylated Human GITR / TNFRSF18 Protein, His,Avitag™ (MALS verified)

Catalog # GIR-H82E1



#### **Synonym**

AITR,GITR,TNFRSF18,CD357

#### Source

Biotinylated Human GITR Protein, His, Avitag(GIR-H82E1) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Glu 161 (Accession # Q9Y5U5-1).

Predicted N-terminus: Gln 26

### **Molecular Characterization**

GITR(Gln 26 - Glu 161)
Q9Y5U5-1
Poly-his Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 18.1 kDa. The protein migrates as 22-26 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.

# Endotoxin

Less than 1.0 EU per μg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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

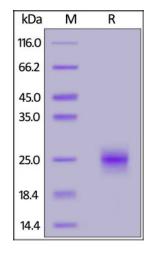
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

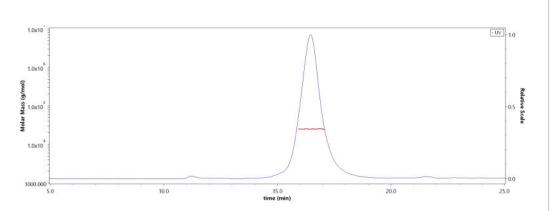
## **SDS-PAGE**



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

# **Bioactivity-ELISA**

## **SEC-MALS**



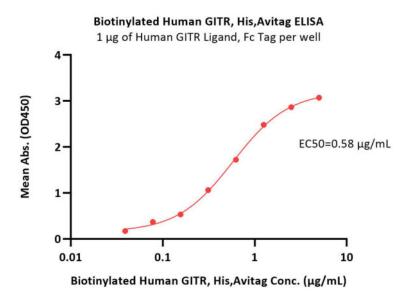
The purity of Biotinylated Human GITR Protein, His, Avitag (Cat. No. GIR-H82E1) is more than 95% and the molecular weight of this protein is around 20-30 kDa verified by SEC-MALS.

Report

# Biotinylated Human GITR / TNFRSF18 Protein, His,Avitag™ (MALS verified)







Immobilized Human GITR Ligand, Fc Tag at 10  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human GITR, His,Avi tag<sup>TM</sup> (Cat. No. GIR-H82E1) with a linear range of 0.039-0.625  $\mu$ g/mL (QC tested).

# Background

Glucocorticoid-induced TNFR-related protein (GITR) is also known as Tumor necrosis factor receptor superfamily member 18 (TNFRSF18), activation-inducible TNFR family receptor (AITR), CD antigen CD357, which is a member of the tumor necrosis factor receptor (TNF-R) superfamily. GITR is receptor for TNFSF18, which seems to be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. GITR also mediated NF-kappa-B activation via the TRAF2/NIK pathway.

# **Clinical and Translational Updates**

