

# Human GITR/TNFRSF18 Protein

Cat. No. GTR-HM101

## Description

<b>Source</b>	Recombinant Human GITR/TNFRSF18 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln26-Glu161.
<b>Accession</b>	Q9Y5U5-1
<b>Molecular Weight</b>	The protein has a predicted MW of 15.4 kDa. Due to glycosylation, the protein migrates to 25-28 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

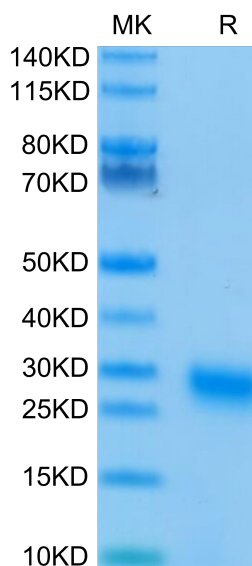
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

GITR (glucocorticoid-induced tumor necrosis factor receptor), also known as AITR and TNFRSF18, is a 40 kDa transmembrane glycoprotein that functions in immune regulation. GIRT is a receptor for TNFSF18. Seems to be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. Mediated NF-kappa-B activation via the TRAF2/NIK pathway.

## Assay Data

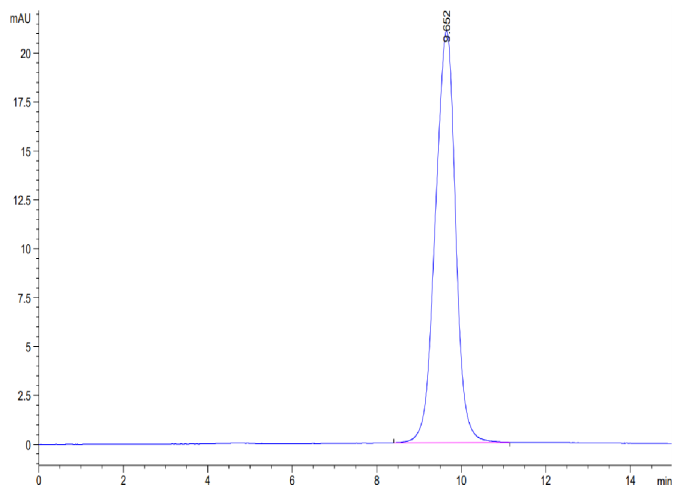
### Bis-Tris PAGE



Human GITR on Bis-Tris PAGE under reduced condition. The purity is greater than 95%

### SEC-HPLC

Assay Data

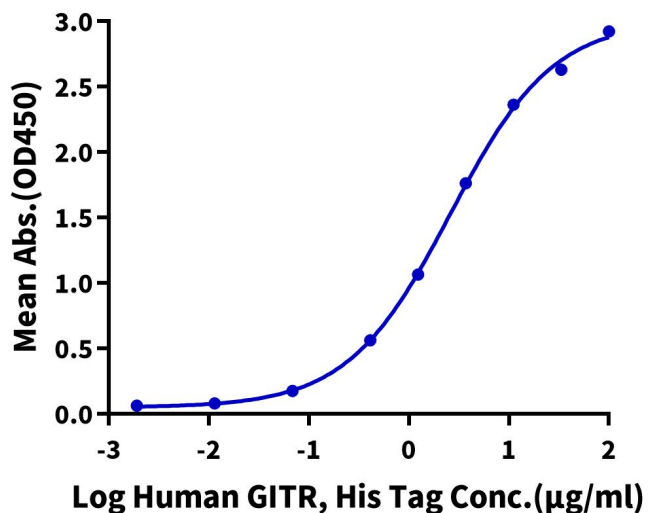


The purity of Human GITR is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human GITR, His Tag ELISA**

0.5µg Human GITR Ligand Trimer, hFc Tag Per Well



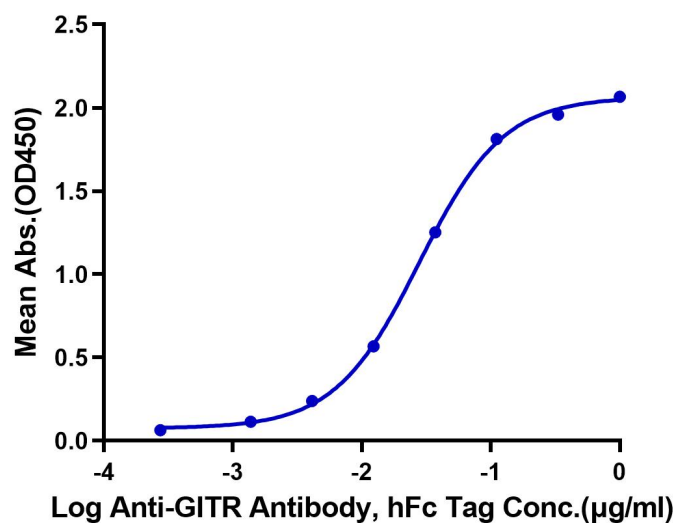
Immobilized Human GITR Ligand Trimer, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human GITR, His Tag with the EC50 of 2.60µg/ml determined by ELISA (QC Test).

ELISA Data

Assay Data

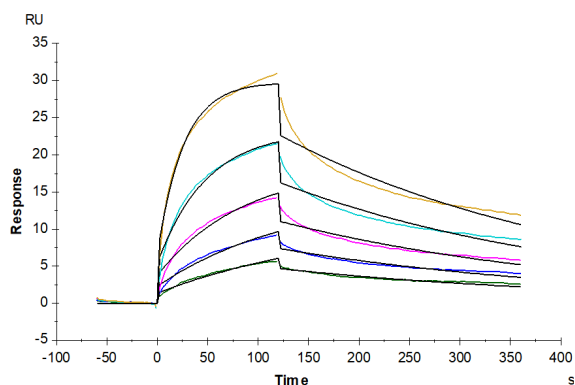
**Human GITR, His Tag ELISA**

0.05µg Human GITR, His Tag Per Well



Immobilized Human GITR, His Tag at 0.5µg (100µl/Well) on the plate. Dose response curve for Anti-GITR Antibody, hFc Tag with the EC50 of 27.9ng/ml determined by ELISA.

SPR Data



Human GITR, His Tag captured on CM5 Chip via Anti-his antibody can bind Human GITR Ligand Trimer, hFc Tag with an affinity constant of 4.47 nM as determined in SPR assay (Biacore T200).