

Human TIGIT Protein

Cat. No. TIG-HM210

Description

Source	Recombinant Human TIGIT Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Met22-Pro141.
Accession	Q495A1-1
Molecular Weight	The protein has a predicted MW of 39.8 kDa. Due to glycosylation, the protein migrates to 48-50 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by SEC-HPLC

Formulation and Storage

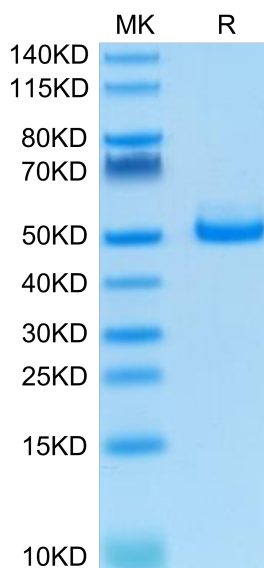
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

TIGIT, also called Vstm3, Vsig9, and WUCAM, is a transmembrane protein in the CD28 family of the Ig superfamily proteins. IGIT is expressed at low levels on peripheral memory and regulatory CD4 T-cells and NK cells and is up-regulated following activation of these cells.

Assay Data

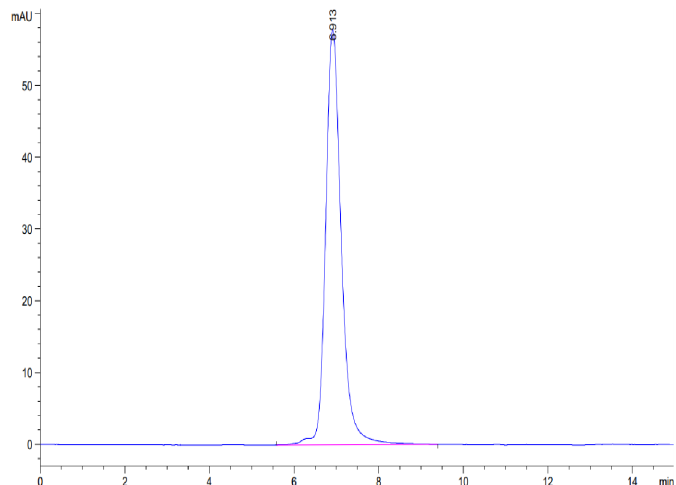
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

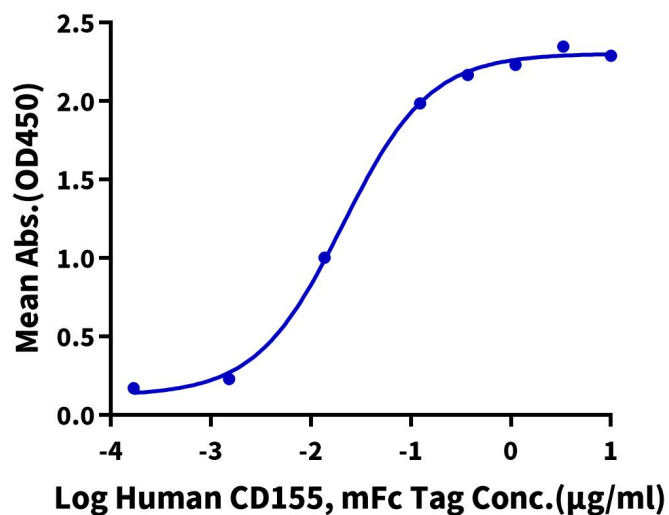


The purity of Human TIGIT is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human TIGIT, hFc Tag ELISA

0.1µg Human TIGIT, hFc Tag Per Well

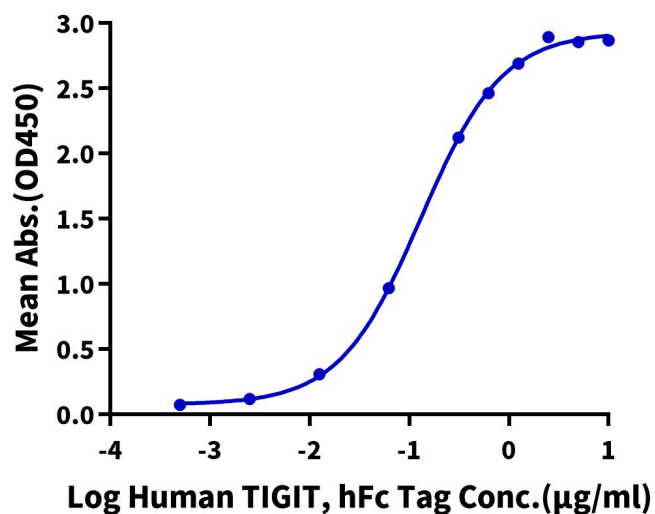


Immobilized Human TIGIT, hFc Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human CD155, mFc Tag with the EC50 of 20.9ng/ml determined by ELISA (QC Test).

ELISA Data

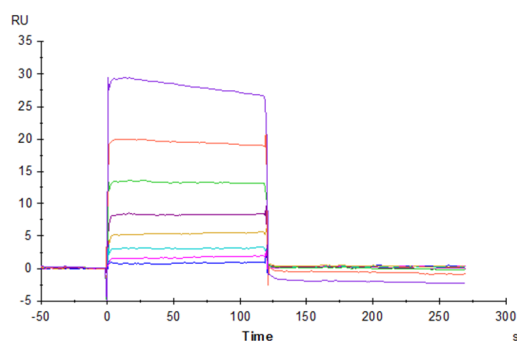
Assay Data

Human TIGIT, hFc Tag ELISA

0.2 μg Biotinylated Human Nectin-2, His Tag Per Well

Immobilized Biotinylated Human Nectin-2, His Tag at $2\mu\text{g}/\text{ml}$ ($100\mu\text{l}/\text{well}$) on the streptavidin precoated plate ($5\mu\text{g}/\text{ml}$). Dose response curve for Human TIGIT, hFc Tag with the EC_{50} of $0.13\mu\text{g}/\text{ml}$ determined by ELISA.

SPR Data



Human TIGIT, hFc Tag captured on CM5 Chip via Protein A can bind Biotinylated Human Nectin-2, His-Avi Tag with an affinity constant of $1.84\mu\text{M}$ as determined in SPR assay (Biacore T200).