

Human TIGIT Protein

Cat. No. TIG-HM110

Description

Source	Recombinant Human TIGIT Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Met22-Pro141.
Accession	Q495A1-1
Molecular Weight	The protein has a predicted MW of 14 kDa. Due to glycosylation, the protein migrates to 20-25 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

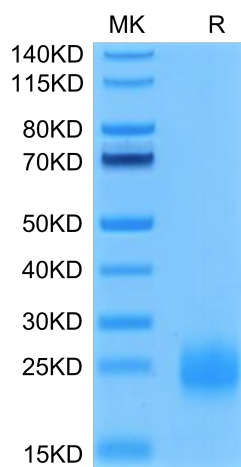
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled 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.

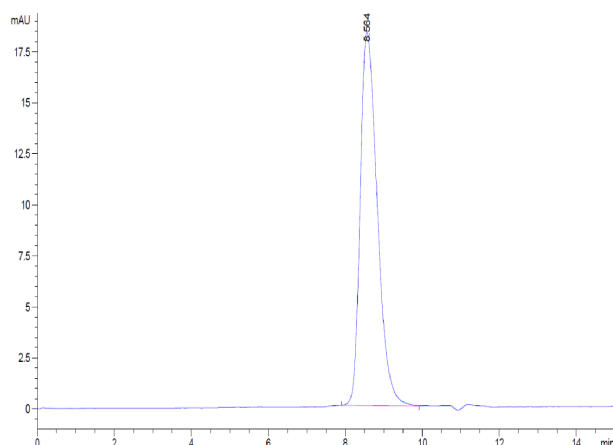
Assay Data

Tris-Bis PAGE



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

SEC-HPLC



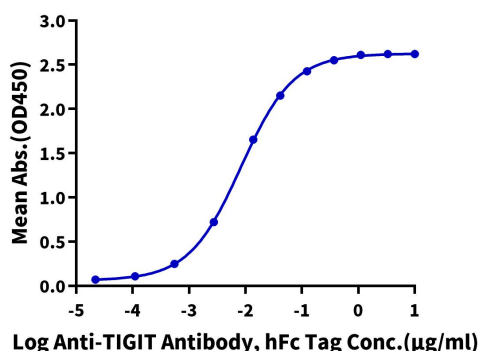
The purity of Human TIGIT is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human TIGIT, His Tag ELISA

0.05µg Human TIGIT, His Tag Per Well

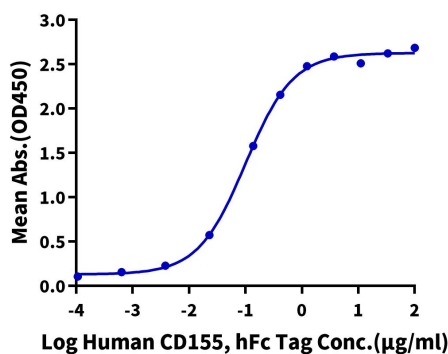


Immobilized Human TIGIT, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-TIGIT Antibody, hFc Tag with the EC50 of 8.3ng/ml determined by ELISA (QC Test).

ELISA Data

Human TIGIT, His Tag ELISA

0.05µg Human TIGIT, His Tag Per Well

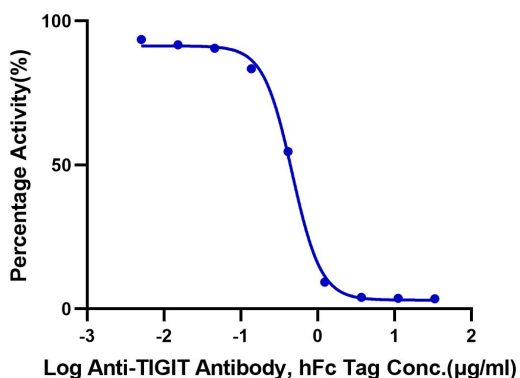


Immobilized Human TIGIT, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Human CD155, hFc Tag with the EC50 of 0.1µg/ml determined by ELISA.

Blocking Data

Inhibition of Human TIGIT and CD155 Binding

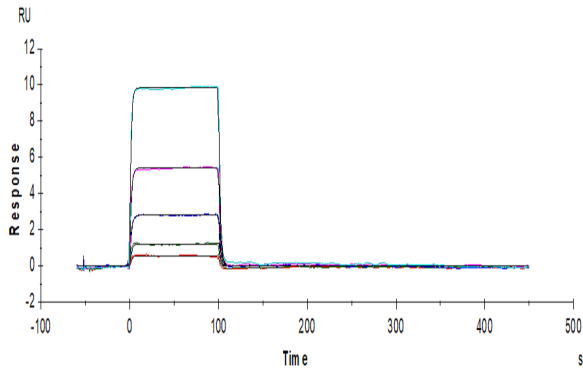
0.2µg Human TIGIT, His Tag Per Well



Serial dilutions of Anti-TIGIT Antibody were added into Human TIGIT, His Tag : Biotinylated CD155, hFc Tag binding reactions. The half maximal inhibitory concentration (IC50) is 0.46µg/ml.

SPR Data

Assay Data



Human CD155, hFc Tag captured on Protein A chip, can bind Human TIGIT, His Tag with an affinity constant of $0.17\mu\text{M}$ as determined in a SPR assay (Biacore T200).