



Synonym

TIGIT, VSIG9, VSTM3

Source

Human TIGIT, His Tag(TIT-H52H5) is expressed from human 293 cells (HEK293). It contains AA Met 22 - Pro 141 (Accession # [Q495A1-1](#)).

Predicted N-terminus: Met 22

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.8 kDa. The protein migrates as 30-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm 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

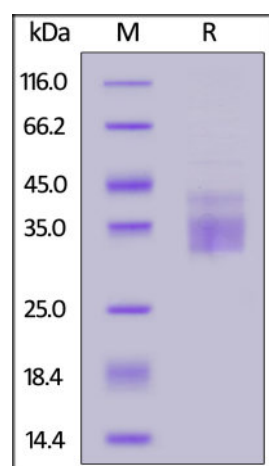
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

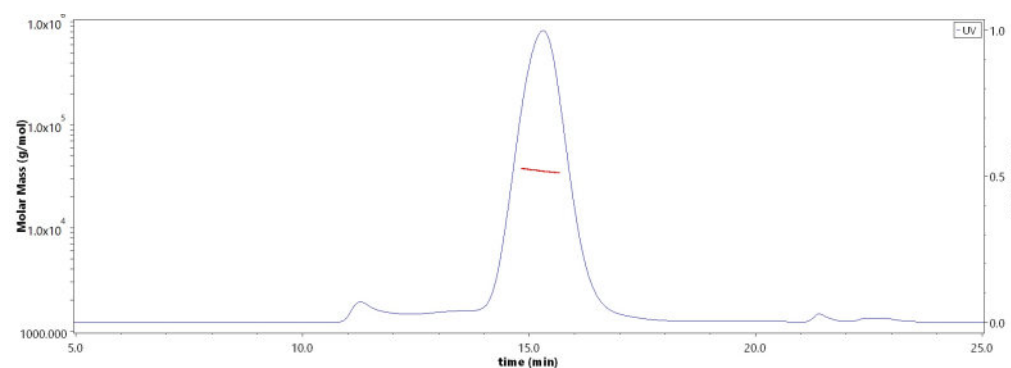
SDS-PAGE



Human TIGIT, His Tag 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

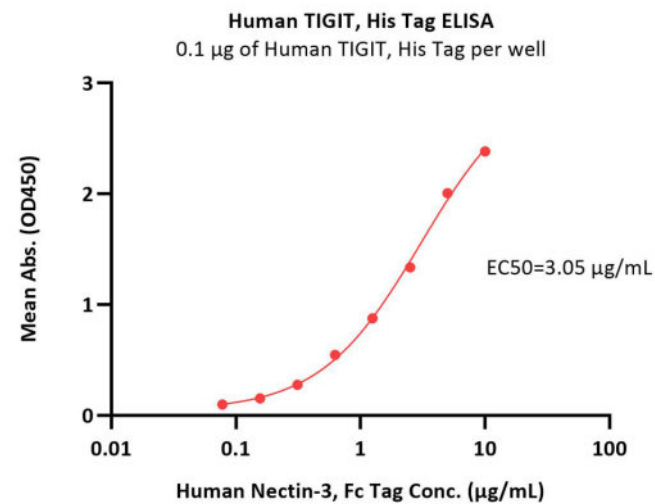
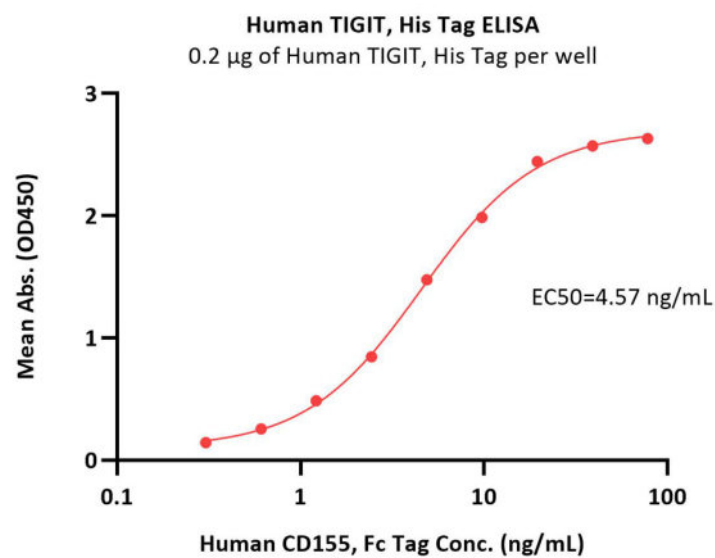


The purity of Human TIGIT, His Tag (Cat. No. TIT-H52H5) is more than 85% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS.

[Report](#)

Discounts, Gifts,
and more!

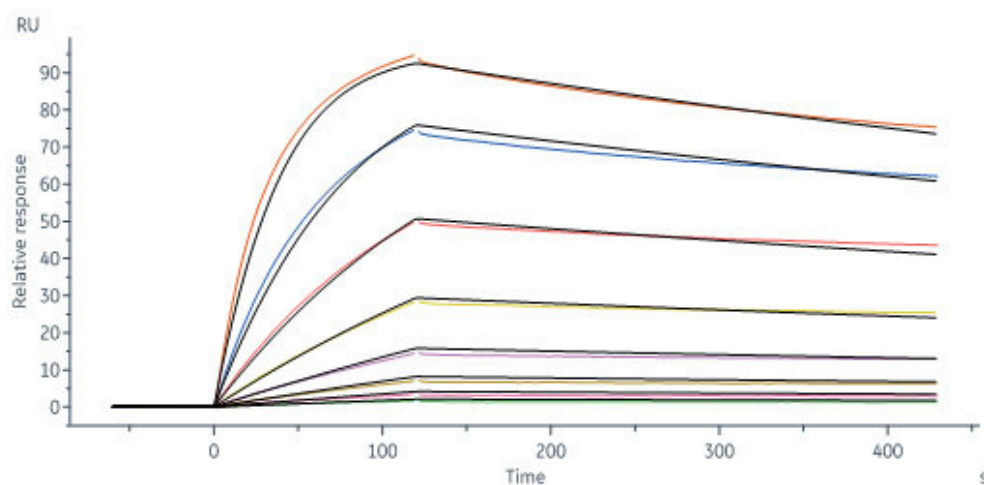




Immobilized Human TIGIT, His Tag (Cat. No. TIT-H52H5) at 2 µg/mL (100 µL/well) can bind Human CD155, Fc Tag (Cat. No. CD5-H5251) with a linear range of 0.3-10 ng/mL (QC tested).

Immobilized Human TIGIT, His Tag (Cat. No. TIT-H52H5) at 1 µg/mL (100 µL/well) can bind Human Nectin-3, Fc Tag (Cat. No. PV3-H5255) with a linear range of 0.078-5 µg/mL (Routinely tested).

Bioactivity-SPR



Anti-hTIGIT antibody captured on CM5 chip via Anti-mouse antibodies surface can bind Human TIGIT, His Tag (Cat. No. TIT-H52H5) with an affinity constant of 1.28 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

T-cell immunoreceptor with Ig and ITIM domains (TIGIT) is also known as V-set and immunoglobulin domain-containing protein 9 (VSIG9), V-set and transmembrane domain-containing protein 3 (VSTM3), which belongs to single-pass type I membrane protein containing an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based inhibitory motif (ITIM). TIGIT 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 (at protein level). TIGIT binds with high affinity to the poliovirus receptor (PVR) which causes increased secretion of IL10 and decreased secretion of IL12B and suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

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