



Synonym

TIGIT, VSIG9, VSTM3

Source

Human TIGIT, Mouse IgG2a Fc Tag(TIT-H5253) is expressed from human 293 cells (HEK293). It contains AA Met 22 - Pro 141 (Accession # [Q495A1-1](#)).

Predicted N-terminus: Met 22

Molecular Characterization

TIGIT(Met 22 - Pro 141) Q495A1-1	mFc(Glu 98 - Lys 330) P01863
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This protein carries a mouse IgG2a Fc tag at the C-terminus.

The protein has a calculated MW of 40.1 kDa. The protein migrates as 45-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

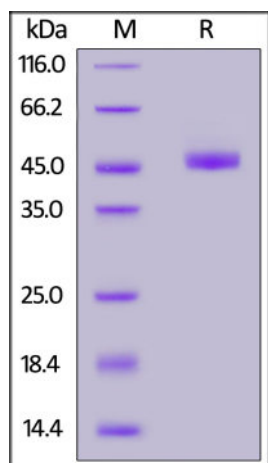
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

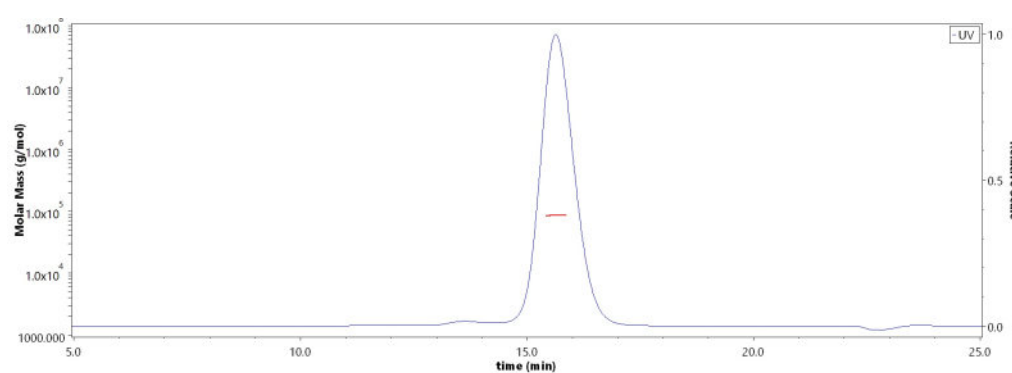
SDS-PAGE



Human TIGIT, Mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

SEC-MALS

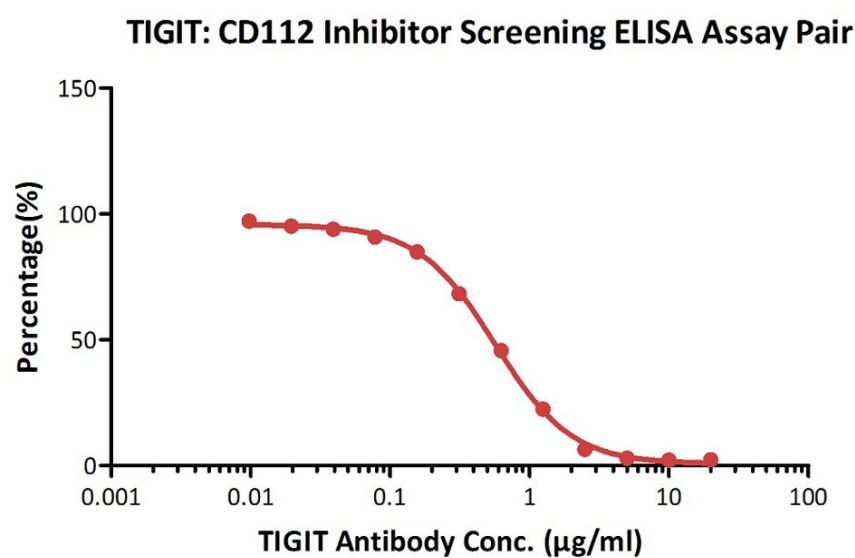
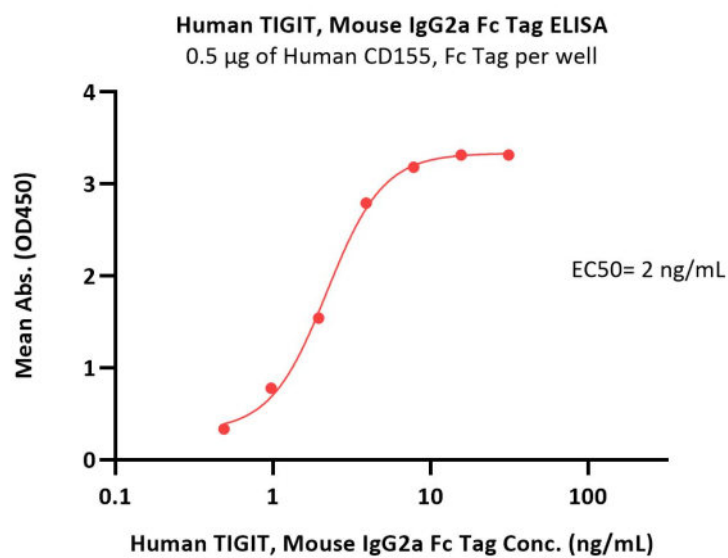


The purity of Human TIGIT, Mouse IgG2a Fc Tag (Cat. No. TIT-H5253) is more than 90% and the molecular weight of this protein is around 80-105 kDa verified by SEC-MALS.

[Report](#)

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and more!

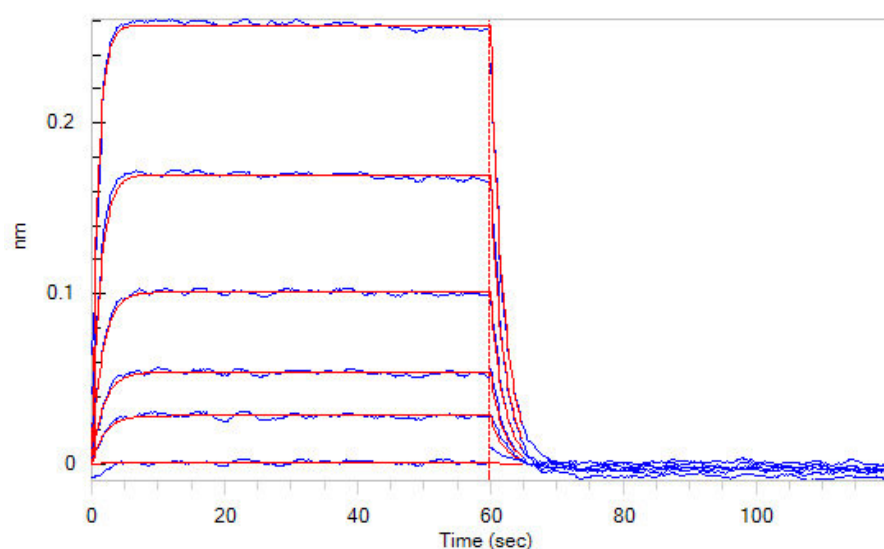




Immobilized Human CD155, Fc Tag (Cat. No. CD5-H5251) at 5 µg/mL (100 µL/well) can bind Human TIGIT, Mouse IgG2a Fc Tag (Cat. No. TIT-H5253) with a linear range of 0.5-4 ng/mL (QC tested).

Serial dilutions of TIGIT Antibody (1:2 serial dilutions, from 20 µg/mL to 0.0097 µg/mL) were added into Human TIGIT, Mouse IgG2a Fc Tag (Cat. No. TIT-H5253): Biotinylated Human Nectin-2, Fc,Avitag (Cat. No. CD2-H82F8) binding reactions. The assay was performed according to the above described protocol. Background was subtracted from data points before curve fitting.

Bioactivity-BLI

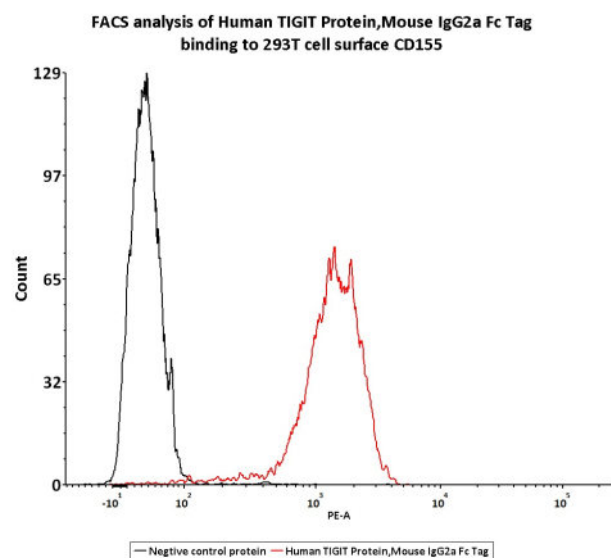


Loaded Human TIGIT, Mouse IgG2a Fc Tag (Cat. No. TIT-H5253) on Protein A Biosensor, can bind Human CD155, His Tag (Cat. No. CD5-H5223) with an affinity constant of 0.92 µM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-FACS

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FACS assay shows that Human TIGIT, Mouse IgG2a Fc Tag (Cat. No. TIT-H5253) can bind to 293T cell overexpressing human CD155. The concentration of TIGIT used is 0.03 $\mu\text{g}/\text{mL}$ (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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