

Synonym

TIGIT, VSIG9, VSTM3

Source

Cynomolgus / Rhesus macaque TIGIT, Fc Tag (TIT-C5254) is expressed from human 293 cells (HEK293). It contains AA Met 89 - Ile 208 (Accession # [G7NXM4-1](#)). In the region Met 89 - Ile 208, the AA sequence of Cynomolgus and Rhesus macaque TIGIT are homologous.

Predicted N-terminus: Met 89

Molecular Characterization

TIGIT(Met 89 - Ile 208) G7NXM4-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 39.9 kDa. The protein migrates as 45-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

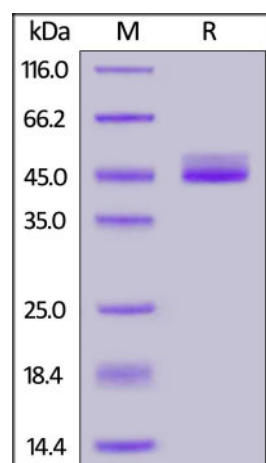
Storage

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

Please avoid repeated freeze-thaw cycles.

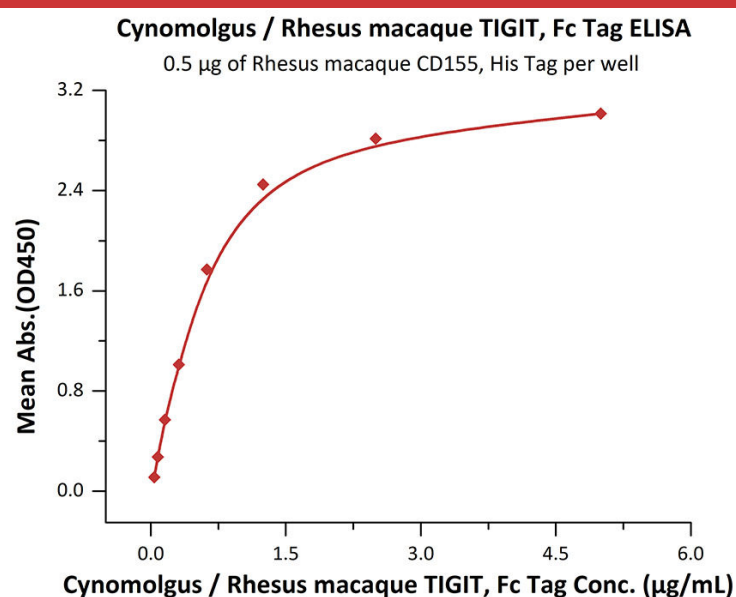
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

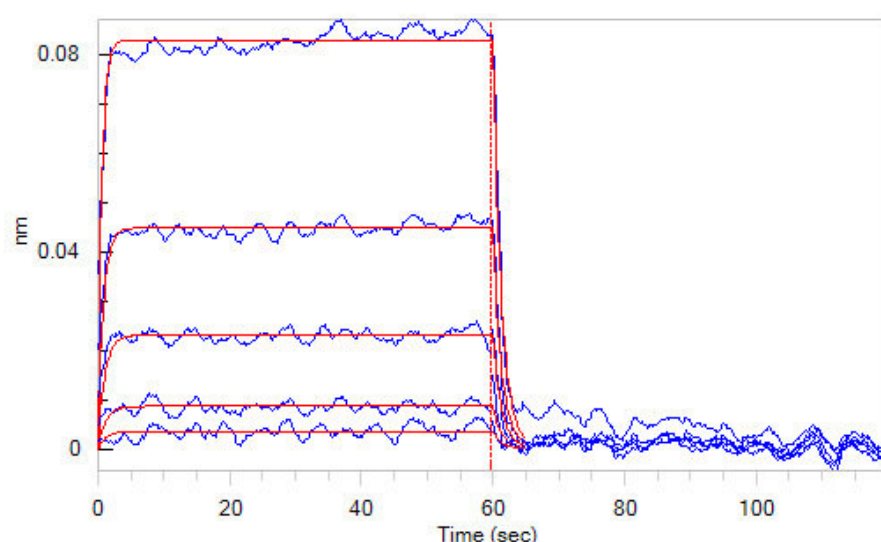
Cynomolgus / Rhesus macaque TIGIT, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Rhesus macaque CD155, His Tag (Cat. No. [CD5-R52H5](#)) at 5 µg/mL (100 µL/well) can bind Cynomolgus / Rhesus macaque TIGIT, Fc Tag (Cat. No. [TIT-C5254](#)) with a linear range of 0.039-0.625 µg/mL (QC tested).

Bioactivity-BLI



Loaded Cynomolgus / Rhesus macaque TIGIT, Fc Tag (Cat. No. [TIT-C5254](#)) on Protein A Biosensor, can bind Human CD155, His Tag (Cat. No. [CD5-H5223](#)) with an affinity constant of 8.2 µM as determined in BLI assay (ForteBio Octet Red96e) (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.

References

- (1) [Yu X., et al., 2009, Nat. Immunol. 10:48-57.](#)
- (2) [Stengel K.F., et al., 2012, Proc. Natl. Acad. Sci. U.S.A. 109:5399-5404.](#)
- (3) [Lozano E., et al., 2012, J. Immunol. 188:3869-3875.](#)

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

