



### Synonym

TIGIT, VSIG9, VSTM3

### Source

Rat TIGIT, Fc Tag(TIT-R5258) is expressed from human 293 cells (HEK293). It contains AA Ala 17 - Ala 138 (Accession # [D3ZTQ2](#)).

Predicted N-terminus: Ala 17

### Molecular Characterization

TIGIT(Ala 17 - Ala 138) D3ZTQ2	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 48-55 kDa under reducing (R) condition, and 85-110 kDa under non-reducing (NR) 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

Tris with Glycine, Arginine and NaCl, pH7.5 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

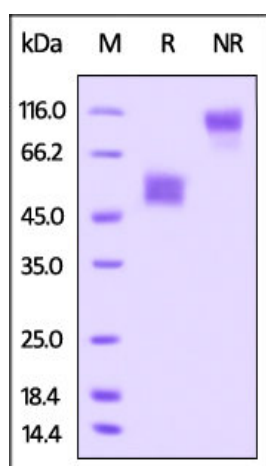
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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

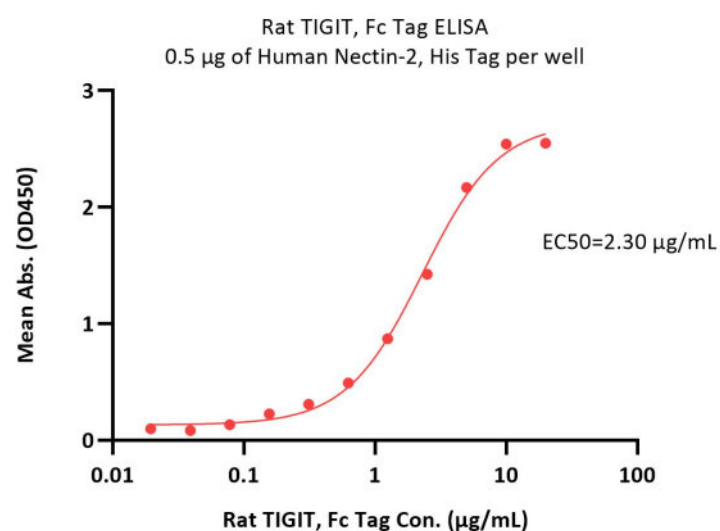


Rat TIGIT, Fc Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

### Bioactivity-ELISA

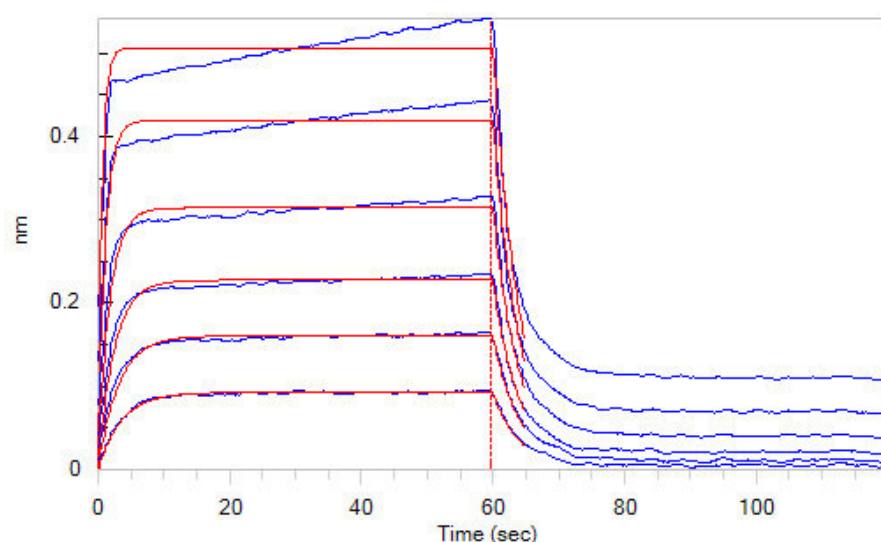
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Immobilized Human Nectin-2, His Tag (Cat. No. PV2-H52E2) at 5 µg/mL (100 µL/well) can bind Rat TIGIT, Fc Tag (Cat. No. TIT-R5258) with a linear range of 0.039-5 µg/mL (QC tested).

### Bioactivity-BLI



Loaded Rat TIGIT, Fc Tag (Cat. No. TIT-R5258) on Protein A Biosensor, can bind Human Nectin-2, His Tag (Cat. No. PV2-H52E2) with an affinity constant of 0.59 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<sup>+</sup> 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

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