

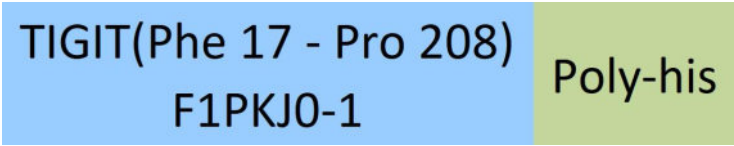
Synonym

TIGIT,VSIG9,VSTM3

Source

Canine TIGIT, His Tag (TIT-C52H7) is expressed from human 293 cells (HEK293). It contains AA Phe 17 - Pro 208 (Accession # [F1PKJ0-1](#)).  
Predicted N-terminus: Phe 17

Molecular Characterization



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

The protein has a calculated MW of 23.1 kDa. The protein migrates as 25-33 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.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. 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

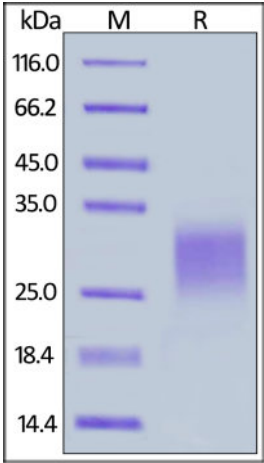
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

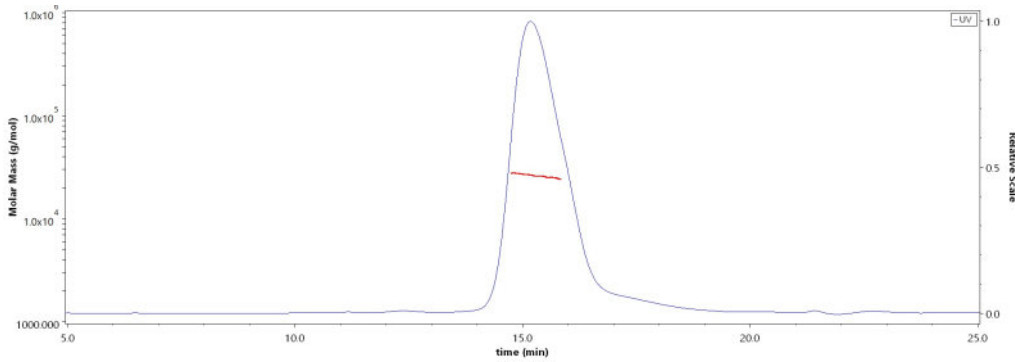
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Canine TIGIT, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

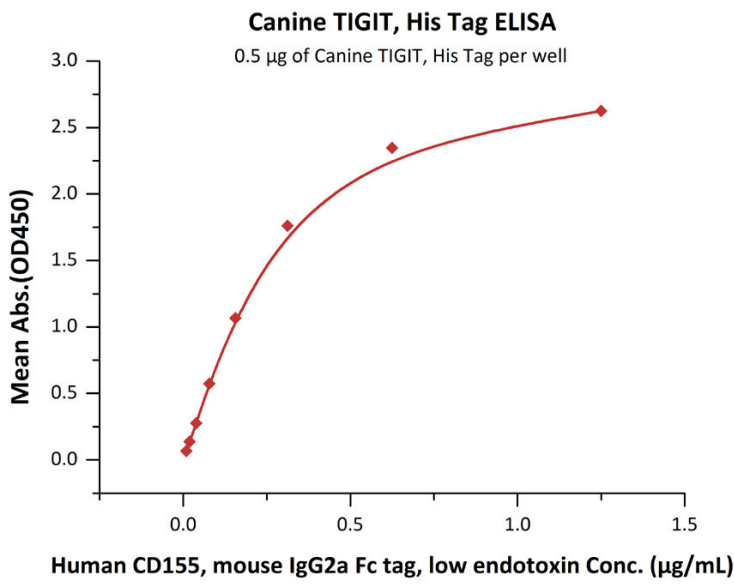
SEC-MALS



The purity of Canine TIGIT, His Tag (Cat. No. TIT-C52H7) was more than 90% and the molecular weight of this protein is around 23-35 kDa verified by SEC-MALS.

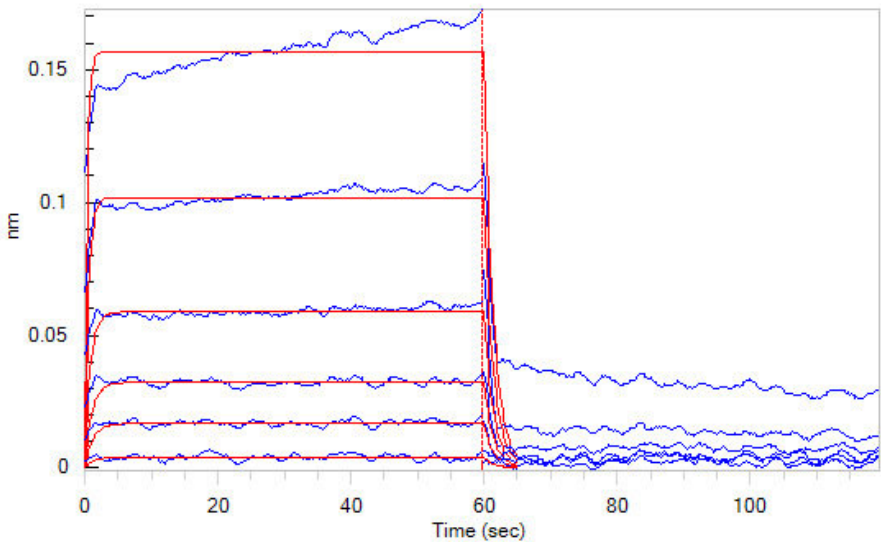
[Report](#)

Bioactivity-ELISA



Immobilized Canine TIGIT, His Tag (Cat. No. [TIT-C52H7](#)) at 5 µg/mL (100 µL/well) can bind Human CD155, mouse IgG2a Fc tag, low endotoxin (Cat. No. [CD5-H5254](#)) with a linear range of 0.01-0.313 µg/mL (QC tested).

Bioactivity-BLI



Loaded Human CD155, Fc Tag (Cat. No. [CD5-H5251](#)) on Protein A Biosensor, can bind Canine TIGIT, His Tag (Cat. No. [TIT-C52H7](#)) with an affinity constant of 5 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.

Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.