# Cynomolgus / Rhesus macaque TIGIT Protein, His Tag (HPLC verified)

Catalog # TIT-C5223

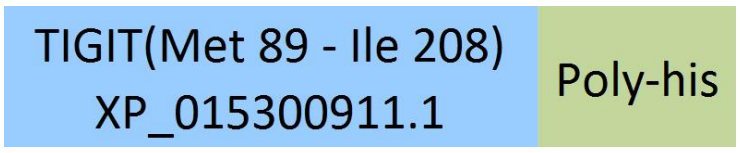
## Synonym

TIGIT,VSIG9,VSTM3

## Source

Cynomolgus / Rhesus macaque TIGIT, His Tag (TIT-C5223) is expressed from human 293 cells (HEK293). It contains AA Met 89 - Ile 208 (Accession # XP_015300911.1). In the region Met 89 - Ile 208, the AA sequence of Cynomolgus and Rhesus macaque TIGIT are homologus.
Predicted N-terminus: Met 89

## Molecular Characterization




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

The protein has a calculated MW of 15.2 kDa. The protein migrates as 18-30 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

## Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

## 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

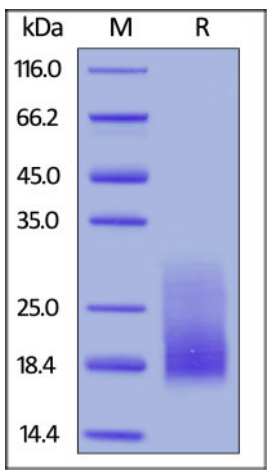
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

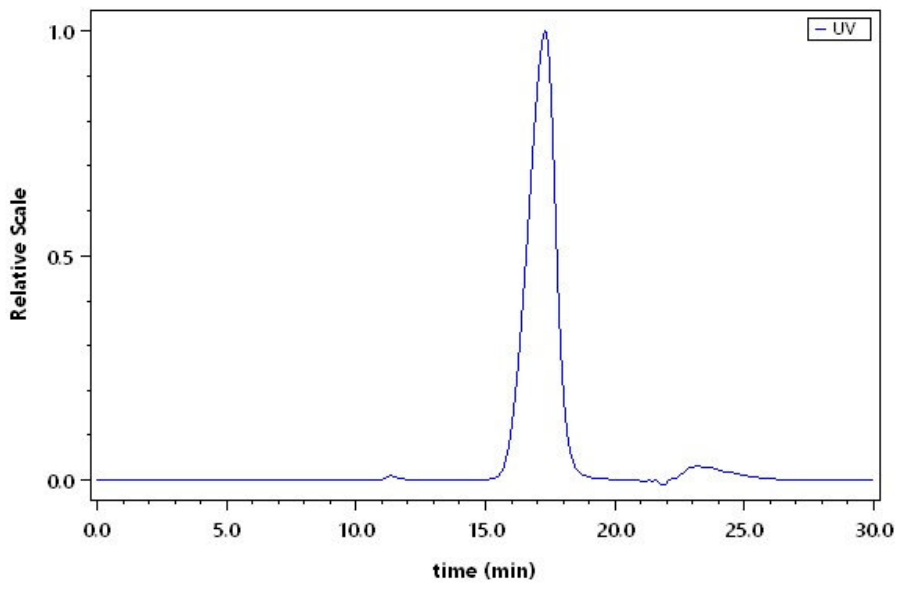
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



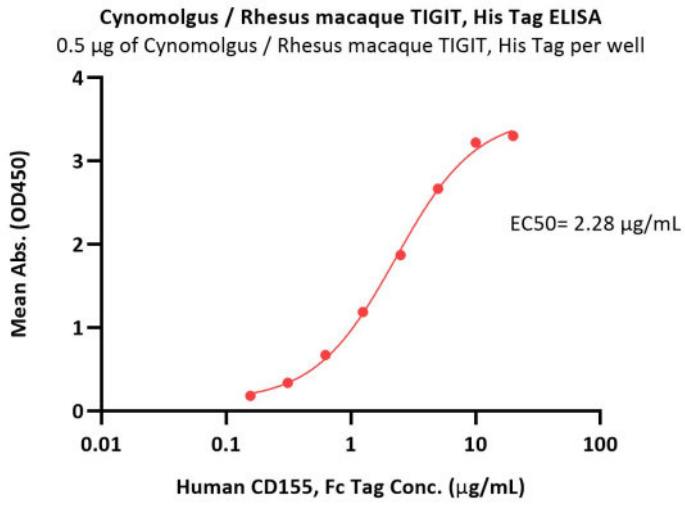

Cynomolgus / Rhesus macaque TIGIT, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## SEC-HPLC



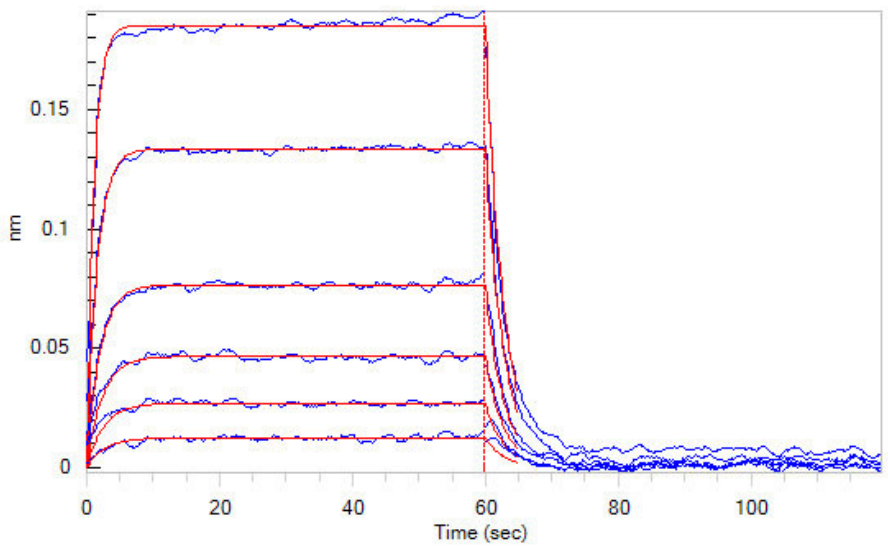

The purity of Cynomolgus / Rhesus macaque TIGIT, His Tag (Cat. No. TIT-C5223) was greater than 90% as determined by SEC-HPLC.

## Bioactivity-ELISA




Immobilized Cynomolgus / Rhesus macaque TIGIT, His Tag (Cat. No. TIT-C5223) at 5 μg/mL (100 μL/well) can bind Human CD155, Fc Tag (Cat. No. CD5-H5251) with a linear range of 0.078-2.5 μg/mL (QC tested).

## Bioactivity-BLI




Loaded Human CD155, Fc Tag (Cat. No. CD5-H5251) on Protein A Biosensor, can bind Cynomolgus / Rhesus macaque TIGIT, His Tag (Cat. No. TIT-C5223) with an affinity constant of 0.61 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.