
Product Name: Bioactive human TIGIT Protein Dimer, Fc Tag

Product Code: CSP-24028-04

FOR RESEARCH USE ONLY (RUO)

Protein Name: TIGIT, Protein Dimer

Alternate Name(s): VSIG9, VSTM3

Expression Host
HEK293T

Amino Acid Range
M22-P141

Protein Construct

TIGIT protein dimer contains a TIGIT extracellular domain (UniProt# Q495A1) with a homodimer Fc tag at the C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight

104 kDa. The migration range of the dimer under non-reducing condition is 85-150 kDa on SDS PAGE.

Purity

Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Shipping Conditions

Product is shipped at ambient temperature.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4 with 10% trehalose as a protectant

Stability & Storage

On receipt, store at -20 C or lower for long term storage.

This product is stable at:

-20 to -70 C for 12 months from date of receipt in lyophilized state.

-70 C for 3 months after reconstitution under sterile conditions.

Avoid repeated freeze-thaw cycles

Reconstitution of lyophilized product

For best performance, we strongly recommend you reconstitute the lyophilized product with deionized water to a stock solution of 500 µg/mL.

Solubilize for 20 minutes at room temperature with occasional gentle mixing. Avoid shaking or vortexing.

For 25µg product size:

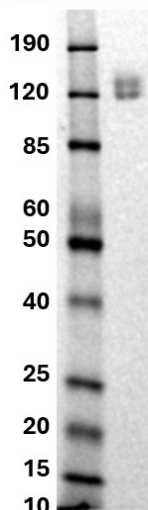
Reconstitute with 50 µL sterile deionized water.

For 100µg product size:

Reconstitute with 200 µL sterile deionized water.

SDS-PAGE

KDa MW NR



MW: Molecular Weight marker reduced condition

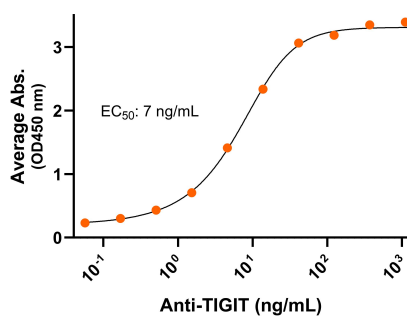
NR: TIGIT dimer under non-reducing condition

The migration range of the dimer under non-reducing condition is 85-150 kDa on SDS PAGE.

Antibody Binding

Human TIGIT-Fc dimer, ELISA

0.2 µg of TIGIT dimer per well

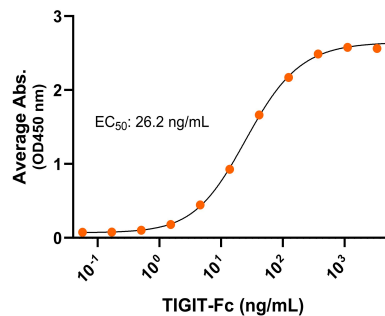


Immobilize TIGIT-Fc dimer protein (Cat. No. CSP-24028-04) at 2 µg/mL (100 µL/well) can bind anti-human TIGIT monoclonal antibody with half maximal effective concentration (EC₅₀) range of 3.5-14 ng/mL (QC tested).

Ligand Binding

Human TIGIT-Fc dimer / CD155-His, ELISA

0.2 µg of CD155 dimer per well



Immobilized human CD155 dimer protein, His Tag (Cat. No. CSP-24029-01) at 2 µg/mL (100 µL/well) can bind human TIGIT dimer protein (Cat. No. CSP-24028-04), with half maximal effective concentration (EC₅₀) range of 13.1-52.4 ng/mL (QC tested).

Background

Human TIGIT (T-cell immunoreceptor with Ig and ITIM domains) is also known as VSIG9 (V-set and immunoglobulin domain-containing protein 9), VSTM3 (V-set and transmembrane domain-containing protein 3). TIGIT is a type I membrane protein containing an immunoglobulin variable (Ig-V) domain, a transmembrane domain and cytoplasmic domain. TIGIT is an immune receptor present on peripheral memory and regulatory CD4+ T cells and natural killer (NK) cells. TIGIT binds to CD155 (the poliovirus receptor, PVR) with high affinity and binds to CD112 (PVRL2) with lower affinity. Nectin-4 is also a ligand for TIGIT.