

TIGIT active protein

TIGIT Protein, Mouse, Recombinant (hFc Tag)

CATALOG #
AAA258211

HOST
HEK293 Cells

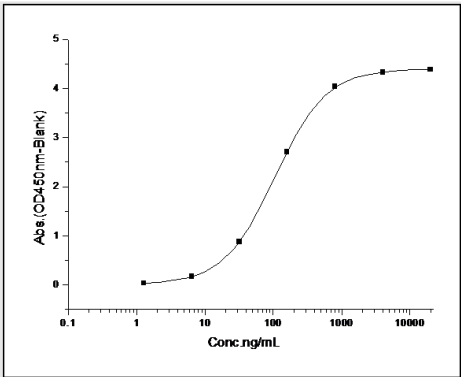
PRODUCT SYNONYMS

TIGIT; TIGIT Protein; Mouse; Recombinant (hFc Tag); Mouse TIGIT/VSTM3 Protein (Fc Tag); ENSMUSG00000071552 Protein; Vstm3 Protein; T cell immunoreceptor with Ig and ITIM domains; TIGIT active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Gly14 1
Species	Mouse
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gly 26
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the mouse TIGIT (PP86176)(Met1-Gly141) was expressed, fused with the Fc region of human IgG1 at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Immobilized mouse PVR-His at 10ug/ml (100uL/well) can bind mouse TIGIT-Fc. The EC50 of mouse TIGIT-Fc is 0.25-0.55ug/ml.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



SDS-PAGE

Application Data
Immobilized mouse PVR-His at 10 ug/ml (100 ul/well) can bind mouse TIGIT-Fc, The EC50 of mouse TIGIT-Fc is 0.25-0.55 ug/ml.

ADDITIONAL INFORMATION

Related Product Information for TIGIT active protein	Background: TIGIT, also known as V-set and transmembrane domain-containing protein 3 (VSTM3) or V-set and immunoglobulin domain-containing protein 9 (VSIG9) is a new surface protein containing an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based inhibitory motif (ITIM). TIGIT is expressed on regulatory, memory, activated T cells and NK cells. It binds PVR with high affinity, and PVRL2 with lower affinity, but not PVRL3. Knockdown of TIGIT with siRNA in human memory T cells did not affect T cell responses, however, TIGIT inhibits NK cytotoxicity directly through its ITIM. TIGIT suppresses T cell activation by promoting the generation of mature immunoregulatory dendritic cells. The binding of PVR to TIGIT on human dendritic cells enhanced the production of IL-1 and diminished the production of IL-12p4. Also, TIGIT counter inhibits the NK-mediated killing of tumor cells and protects normal cells from NK-mediated cytotoxicity thus providing an "alternative self" mechanism for MHC class I inhibition.
Product Categories/Family for TIGIT active protein	ITIM/ITAM Immunoreceptors and Related Molecules Cancer Drug Targets
References	Ota T., et al.,(2004), Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36:40-45.Bechtel S., et al., (2007), The full-ORF clone resource of the German cDNA consortium.BMC Genomics 8:399-399.Yu X., Harden K., et al.,(2009), The surface protein TIGIT suppresses T cell activation by promoting the generation of mature immunoregulatory dendritic cells. Nat. Immunol. 10:48-57.

NCBI AND UNIPROT INFORMATION

NCBI GI #	226423924
NCBI GeneID	100043314
NCBI Accession #	NP_001139797.1; PP86176
NCBI GenBank Nucleotide #	NM_001146325.1
Molecular Weight	26,959 Da
NCBI Official Full Name	T-cell immunoreceptor with Ig and ITIM domains
NCBI Official Synonym Full Names	T cell immunoreceptor with Ig and ITIM domains
NCBI Official Symbol	Tigit
NCBI Official Synonym Symbols	Vstm3
NCBI Protein Information	T-cell immunoreceptor with Ig and ITIM domains

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

