

## TIGIT recombinant protein

TIGIT Protein, Human, Recombinant (ECD, His Tag), HPLC-verified

CATALOG #  
**AAA259180**

HOST  
**HEK293 Cells**

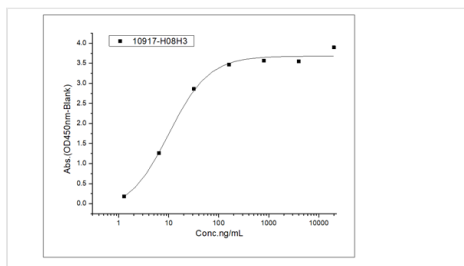
### PRODUCT SYNONYMS

TIGIT; TIGIT Protein; Human; Recombinant (ECD; His Tag); HPLC-verified; T cell immunoreceptor with Ig and ITIM domains; VSIG9 Protein; VSTM3 Protein; WUCAM Protein; TIGIT recombinant protein

### PRODUCT SPECIFICATIONS

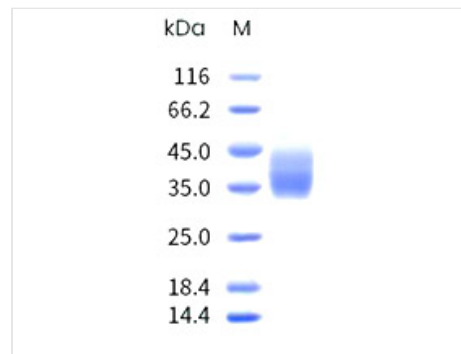
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|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293 Cells                                                                                                                                                                                                                                                                |
| Purity/Purification     | >= 95% as determined by SDS-PAGE.<br>= 95% as determined by SEC-HPLC.                                                                                                                                                                                                       |
| Form/Format             | Lyophilized from sterile PBS, pH 7.4.<br>Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.                                                                                                                               |
| Species                 | Human                                                                                                                                                                                                                                                                       |
| Predicted N Terminal    | Met 22                                                                                                                                                                                                                                                                      |
| Endotoxin               | <1.0 EU per ug protein as determined by the LAL method.                                                                                                                                                                                                                     |
| Protein Construction    | A DNA sequence encoding the extracellular domain of human TIGIT (NP_776160.2)(Met22-Pro141) with a C-terminal polyhistidine tag was expressed.                                                                                                                              |
| Activity                | Immobilized Recombinant Human CD155/PVR/NECL5 Protein (Fc Tag)(Cat:10109-H02H) at 2ug/mL (100uL/well) can bind Recombinant Human TIGIT/VSTM3 Protein (His Tag)(Cat:10917-H08H3), the EC50 is 6-18 ng/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. |

### IMAGES



#### Application Data

Immobilized Recombinant Human CD155 / PVR / NECL5 Protein (Fc Tag) (Cat:10109-H02H) at 2ug/mL (100uL/well) can bind Recombinant Human TIGIT / VSTM3 Protein (His Tag) (Cat:AAA259180), the EC50 is 6-18 ng/mL.



#### Application Data

ADDITIONAL INFORMATION

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for TIGIT recombinant protein | 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. |
| 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 #                        | 256600228                                                                                                                                                                                                                                                       |
| NCBI GeneID                      | 201633                                                                                                                                                                                                                                                          |
| NCBI Accession #                 | NP_776160.2                                                                                                                                                                                                                                                     |
| NCBI GenBank Nucleotide #        | NM_173799.3                                                                                                                                                                                                                                                     |
| Molecular Weight                 | 18,432 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    | VSIG9; VSTM3; WUCAM                                                                                                                                                                                                                                             |
| NCBI Protein Information         | T-cell immunoreceptor with Ig and ITIM domains; V-set and transmembrane domain containing 3; V-set and immunoglobulin domain containing 9; Washington University cell adhesion molecule; V-set and transmembrane domain-containing protein 3; V-set and immunog |

**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.

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Online datasheet: <https://stage.aaabiotech.com/tigit-recombinant-protein-hek293-cells/259180>