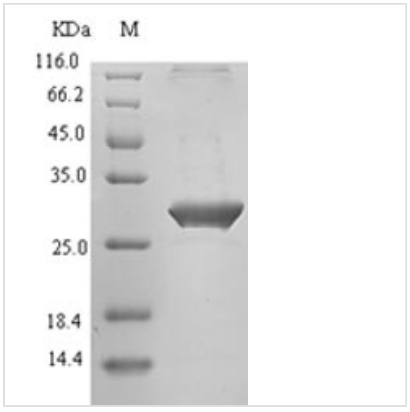
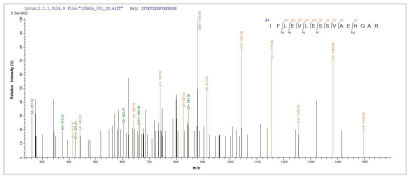
Recombinant Human T-cell immunoreceptor with Ig and ITIM domains (TIGIT), partial

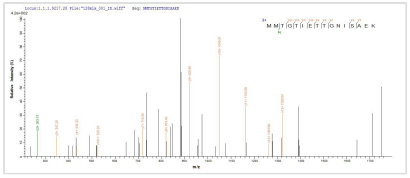
Product Code	CSB-EP675446HU
Relevance	Binds with high affinity to the poliovirus receptor (PVR) which causes increased secretion of IL10 and decreased secretion of IL12B and suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells.
Abbreviation	Recombinant Human TIGIT protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q495A1
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MMTGTIETTGNISAEKGGSIILQCHLSSTTAQVTQVNWEQQDQLLAICNADLG WHISPSFKDRVAPGPGLGLTLQSLTVNDTGEYFCIYHTYPDGTYTGRIFLEVLE SSVAEHGARFQIP
Research Area	Immunology
Source	E.coli
Target Names	TIGIT
Expression Region	22-141aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	26.0 kDa
Protein Length	Extracellular Domain
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP675446HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) TIGIT.



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Description

The recombinant Human TIGIT protein is encoded by the gene of TIGIT (22-141aa). The gene of TIGIT was cloned in a system (E.coli) that supported the expression of TIGIT and translation of messenger RNA. Modification of TIGIT by recombinant DNA technology could lead to the expression of the target protein. The protein was fused with N-terminal 6xHis-SUMO tag in the production. The purity is 90% determined by SDS-PAGE.

TIGIT (VSIG9, VSTM3) is a protein coding gene that encodes T-cell immunoreceptor with Ig and ITIM domains. According to some studies, TIGIT may have the following features.
TIGIT, an inhibitory receptor expressed on lymphocytes, has recently been proposed as a major emerging target for cancer immunotherapy. TIGIT has an intrinsic suppressive function of T cells. The surface protein TIGIT inhibits T cell activation by promoting the generation of mature immunoregulatory dendritic cells. TIGIT is a key inhibitor of the cancer immune cycle. The immunosensor TIGIT regulates antitumor and antiviral CD8+ T cell effector functions. The TIGIT/CD226 axis regulates human T cell function. Interaction of TIGIT with PVR and PVRL2 inhibits human NK cell cytotoxicity. TIGIT, a new immunotherapy target, is moving from the lab to the bedside.

Shelf Life

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Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.