

HVEM Active Protein | TNFRSF14 active protein

HVEM Protein, Human, Recombinant (ECD, His Tag)

CATALOG #
AAA257872

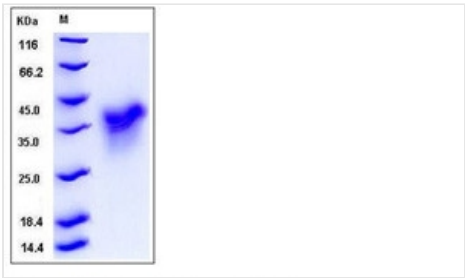
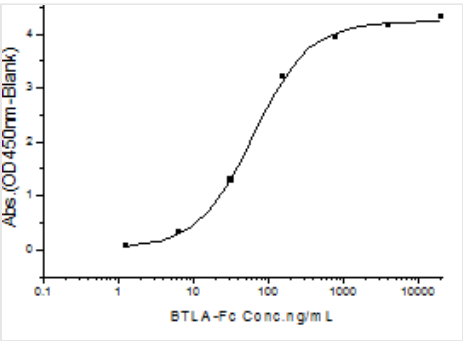
HOST
HEK293 Cells

PRODUCT SYNONYMS

HVEM; HVEM Protein; Human; Recombinant (ECD; His Tag); Human HVEM/TNFRSF14 Protein (His Tag); ATAR Protein; CD270 Protein; HVEA Protein; LIGHTR Protein; TR2 Protein; tumor necrosis factor receptor superfamily; member 14; TNFRSF14 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-Val20 2
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Pro 37
Tag	C-His
Protein Construction	A DNA sequence encoding the extracellular domain (Met1-Val202) of human TNFRSF14 (NP_003811.2) was expressed fused with a C-terminal polyhistidine tag.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Measured by its binding ability in a functional ELISA. Immobilized recombinant Human HVEM-His at 10ug/ml (100uL/well) can bind human BTLA-Fc with a linear range of 1.28-20ug/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.



SDS-PAGE

Application Data
Measured by its binding ability in a functional ELISA. Immobilized recombinant Human HVEM-His at 10 ug/ml (100 ul/well) can bind human BTLA-Fc with a linear range of 1.28-20 ug/ml.

ADDITIONAL INFORMATION

Related Product Information for TNFRSF14 active protein	Background: Herpesvirus entry mediator (HVEM), also referred to as TNFRSF14, TR2 (TNF receptor-like molecule) and ATAR (another TRAF-associated receptor), is a member of type I transmembrane protein belonging to the TNF-receptor superfamily. It is expressed on many immune cells, including T and B cells, NK cells, monocytes, and neutrophils. Two TNF superfamily ligands lymphotoxin alpha (TNF-beta) and LIGHT (TNFSF14) are identified as cellular ligands for HVEM and initiate the positive signaling. However, recent studies have revealed that HVEM is also involved in the unique inhibitory signaling pathway for T cells through activating tyrosine phosphorylation of the immunoreceptor tyrosine-based inhibitory motif (ITIM) in B and T lymphocyte attenuator (BTLA). HVEM provides a stimulatory signal following engagement with LIGHT (TNFSF14) on T cells. In contrast, it can also provide an inhibitory signal to T cells when it binds the B and T lymphocyte attenuator (BTLA), a ligand member of the Immunoglobulin (Ig) superfamily. Thus, HVEM may be viewed as a molecular switch, capable of facilitating both stimulatory and inhibitory cosignaling in T cells. Substantial evidence from both human disease and from experimental mouse models has indicated that dysregulation of the LIGHT-HVEM-BTLA cosignaling pathway can cause inflammation in the lung and in mucosal tissues.
Product Categories/Family for TNFRSF14 active protein	Cancer Drug Targets
References	Murphy KM, et al. (2006) Balancing co-stimulation and inhibition with BTLA and HVEM. Nat Rev Immunol. 6(9): 671-81.Heo SK, et al. (2007) HVEM signaling in monocytes is mediated by intracellular calcium mobilization. J Immunol. 179(9): 6305-10.Steinberg MW, et al. (2008) A crucial role for HVEM and BTLA in preventing intestinal inflammation. J Exp Med. 205(6): 1463-76.Pasero C, et al. (2009) A role for HVEM, but not lymphotoxin-beta receptor, in LIGHT-induced tumor cell death and chemokine production. Eur J Immunol. 39(9): 2502-14.Cheung TC. Modulation of T cell proliferation through the LIGHT-HVEM-BTLA cosignaling pathway. Recent Pat DNA Gene Seq. 3(3): 177-82.

NCBI AND UNIPROT INFORMATION

NCBI GI #	23200041
NCBI GeneID	8764
NCBI Accession #	NP_003811.2
NCBI GenBank Nucleotide #	NM_003820.3
UniProt Accession #	Q92956; Q6IB95; Q8N634; Q8WXR1; Q96J31; Q9UM65; B3KW30; B9DI89
Molecular Weight	21,351 Da
NCBI Official Full Name	tumor necrosis factor receptor superfamily member 14 isoform 1
NCBI Official Synonym Full Names	TNF receptor superfamily member 14
NCBI Official Symbol	TNFRSF14

NCBI Official Synonym Symbols	TR2; ATAR; HVEA; HVEM; CD270; LIGHTR
NCBI Protein Information	tumor necrosis factor receptor superfamily member 14
UniProt Protein Name	Tumor necrosis factor receptor superfamily member 14
UniProt Gene Name	TNFRSF14
UniProt Synonym Gene Names	HVEA; HVEM; Herpesvirus entry mediator A; HveA; TR2
UniProt Entry Name	TNR14_HUMAN

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://www.aaabiotech.com/hek293-tnfrsf14-active-protein/hvem/257872>