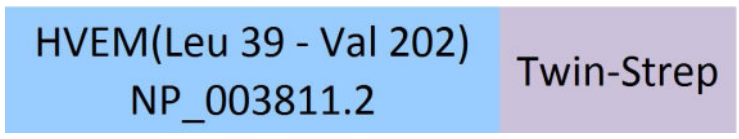
### Synonym

TNFRSF14,ATAR,HVEA,HVEM,LIGHTR,TR2,CD270

### Source

Human HVEM, Strep Tag (HVM-H5283) is expressed from human 293 cells (HEK293). It contains AA Leu 39 - Val 202 (Accession # NP_003811.2). Predicted N-terminus: Leu 39

### Molecular Characterization




This protein carries a twin strep tag at the C-terminus.

The protein has a calculated MW of 20.4 kDa. The protein migrates as 27-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per μg by the LAL method.

### Purity

>90% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

***For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***

### Storage

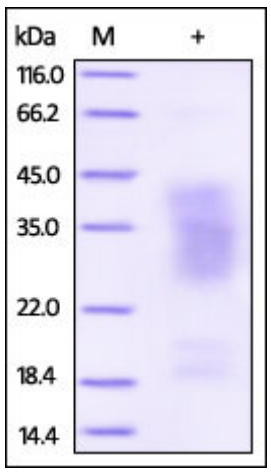
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

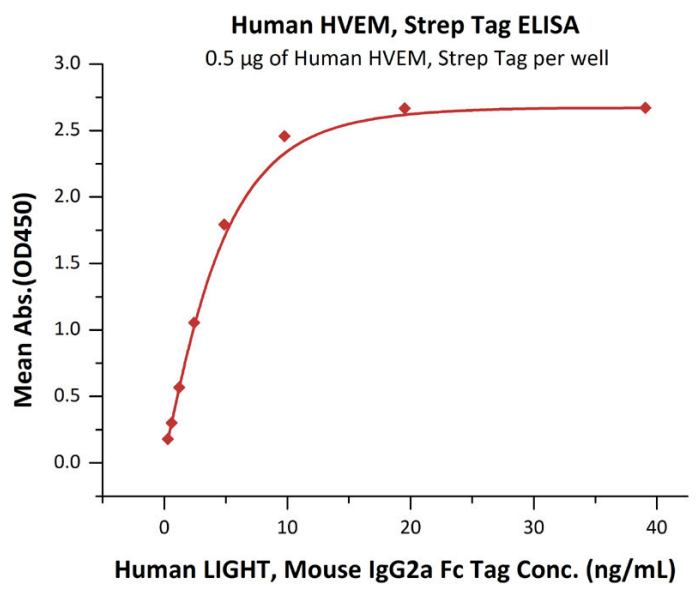
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE




Human HVEM, Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

### Bioactivity-ELISA




Immobilized Human HVEM, Strep Tag (Cat. No. HVM-H5283) at 5 µg/mL (100 µL/well) can bind Human LIGHT, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. LIT-H5256) with a linear range of 0.3-5 ng/mL (QC tested).

## Background

Herpesvirus entry mediator (HVEM) is also known as TNFRSF14, TR2 (TNF receptorlike molecule) and ATAR (another TRAF associated receptor), is a type I membrane protein belonging to the TNF/NGF receptor superfamily. HVEM expression has been detected in peripheral blood T cells, B cells, monocytes and in various tissues enriched in lymphoid cells. The extracellular domain of HVEM has been shown to interact directly with the herpes simplex virus envelope glycoprotein D (gD). Two TNF superfamily ligands, including the secreted TNFβ (lymphotoxin α) and the membrane protein LIGHT (lymphotoxins, exhibits inducible expression, and competes with HSV glycoprotein D for HVEM, a receptor expressed by T lymphocytes), have been shown to be the cellular ligands for HVEM. Besides HVEM, LIGHT can also interact with LTβR, the receptor for lymphotoxin αβ heterotrimer. The role of the HVEM LIGHT /LTβ receptor ligand pair in immune function and herpesvirus pathobiology remains to be elucidated.

## References

(1) Hsu H., et al., 1997, J. Biol. Chem., 272:13471.
(2) Mauri, D.N. et al., 1998, Immunity 8:21.
(3) Montgomery, R.I. et al., 1996, Cell 87:427.
(4) Cheung,T.C.et al., 2005, Proc.Natl.Acad.Sci.USA102:13218-23.

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.