

### **Synonym**

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

## **Source**

Human HVEM, His Tag(HVM-H52E9) is expressed from human 293 cells (HEK293). It contains AA Leu 39 - Val 202 (Accession # Q92956-1). Predicted N-terminus: Leu 39

## **Molecular Characterization**

HVEM(Leu 39 - Val 202) Q92956-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 19.2 kDa. The protein migrates as 30-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

## **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

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

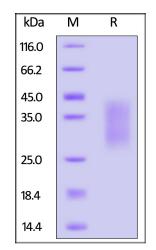
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

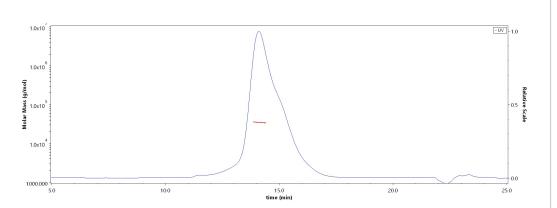
## **SDS-PAGE**



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

## **Bioactivity-ELISA**

#### **SEC-MALS**



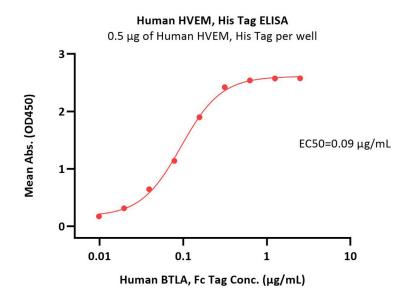
The purity of Human HVEM, His Tag (Cat. No. HVM-H52E9) is more than 90% and the molecular weight of this protein is around 30-40 kDa verified by SEC-MALS.

Report

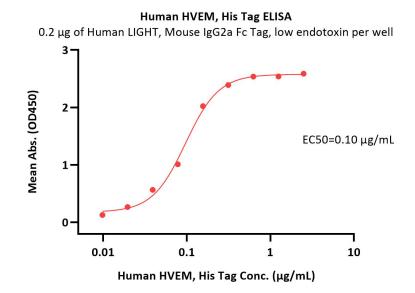
# **Human HVEM / TNFRSF14 Protein, His Tag (MALS verified)**

Catalog # HVM-H52E9





Immobilized Human HVEM, His Tag (Cat. No. HVM-H52E9) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human BTLA, Fc Tag (Cat. No. BTA-H5256) with a linear range of 0.01-0.313  $\mu$ g/mL (QC tested).



Immobilized Human LIGHT, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. LIT-H5256) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human HVEM, His Tag (Cat. No. HVM-H52E9) with a linear range of 0.01-0.156  $\mu$ g/mL (Routinely 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 TNF $\beta$  (lymphotoxin  $\alpha$ ) 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 LT $\beta$ R, the receptor for lymphotoxin  $\alpha\beta$  heterotrimer. The role of the HVEM LIGHT /LT $\beta$  receptor ligand pair in immune function and herpesvirus pathobiology remains to be elucidated.

