

#### Synonym

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

#### Source

Human HVEM, Mouse IgG2a Fc Tag(HVM-H5257) 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 mFc (Glu 98 - Lys 330) P01863

This protein carries a mouse IgG2a Fc tag at the C-terminus

The protein has a calculated MW of 44.2 kDa. The protein migrates as 55-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM NaCl, pH7.5 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**

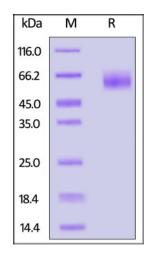
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

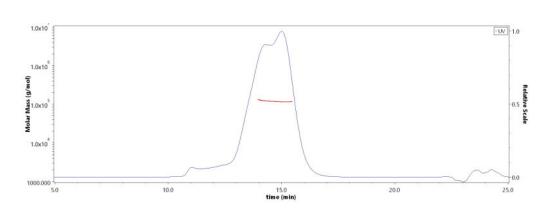
# SDS-PAGE



Human HVEM, Mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**

### **SEC-MALS**



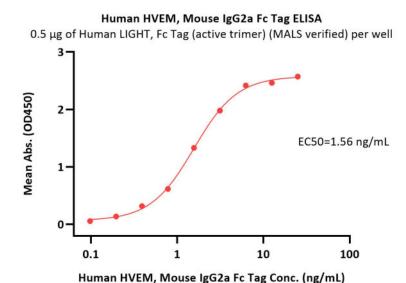
The purity of Human HVEM, Mouse IgG2a Fc Tag (Cat. No. HVM-H5257) is more than 90% and the molecular weight of this protein is around 105-125 kDa verified by SEC-MALS.

Report

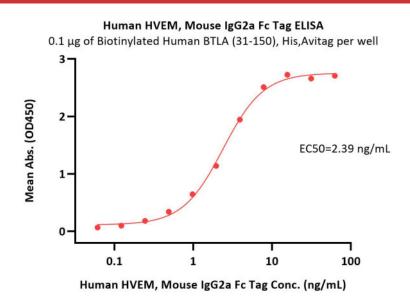
# Human HVEM / TNFRSF14 Protein, Mouse IgG2a Fc Tag (MALS verified)

Catalog # HVM-H5257





Immobilized Human LIGHT, Fc Tag (active trimer) (MALS verified) (Cat. No. LIT-H5269) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human HVEM, Mouse IgG2a Fc Tag (Cat. No. HVM-H5257) with a linear range of 0.4-6 ng/mL (QC tested).



Immobilized Biotinylated Human BTLA (31-150), His,Avitag (Cat. No. BTA-H82E4) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Human HVEM, Mouse IgG2a Fc Tag (Cat. No. HVM-H5257) with a linear range of 0.1-8 ng/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.

## **Clinical and Translational Updates**

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