

Synonym

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

Source

Human HVEM, Mouse IgG2a Fc Tag, low endotoxin (HVM-H5255) 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
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This protein carries a mouse IgG2a Fc tag at the C-terminus.
The protein has a calculated MW of 44.4 kDa. The protein migrates as 55-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.
Contact us for customized product form or formulation.

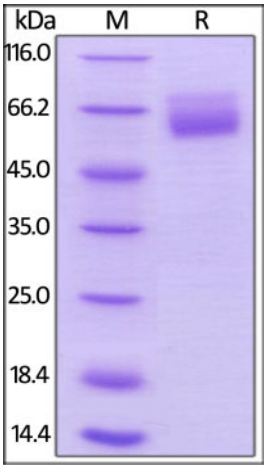
Reconstitution

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

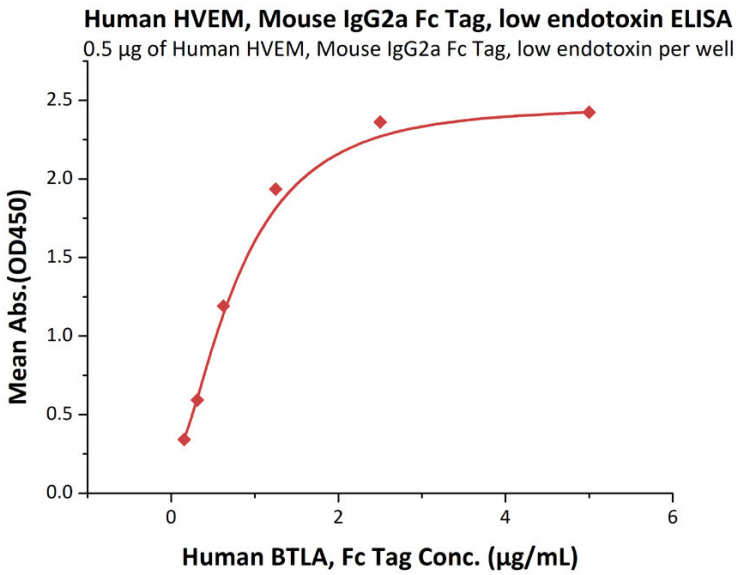
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:
• -20°C to -70°C for 12 months in lyophilized state;
• -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



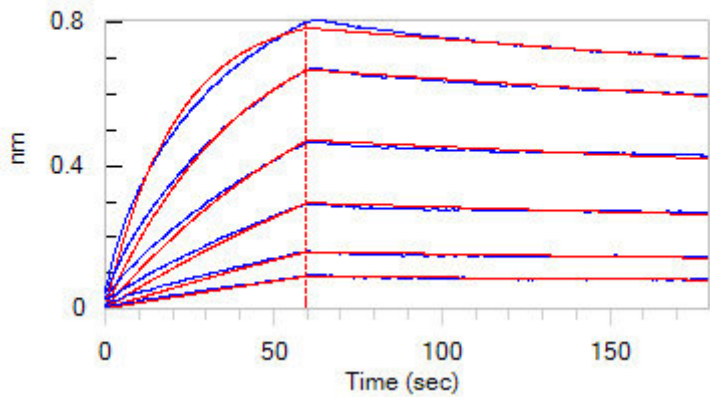
Human HVEM, Mouse IgG2a Fc Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human HVEM, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. [HVM-H5255](#)) at 5 µg/mL (100 µL/well) can bind Human BTLA, Fc Tag (Cat. No. [BTA-H5255](#)) with a linear range of 0.156-1.25 µg/mL (QC tested).

Bioactivity-BLI



Loaded Human BTLA (31-150), His Tag (Cat. No. [BTA-H52H3](#)) on NTA Biosensor, can Human HVEM, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. [HVM-H5255](#)) with an affinity constant of 20.8 nM as determined in BLI assay (ForteBio Octet Red96e) (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 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.

Clinical and Translational Updates

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