

# Human CellExp™ HVEM/TNFRSF14, human recombinant

**CATALOG #:** 7466-20 20 µg  
7466-100 100 µg

**ALTERNATE NAMES:** TNFRSF14, ATAR, HVEA, HVEM, LIGHTR, TR2, Tumor necrosis factor receptor superfamily member 14, Herpesvirus entry mediator.

**SOURCE:** HEK 293 cells (Pro 37 – Val 202)

**PURITY:** ≥ 95% by SDS-PAGE gel

**MOL. WEIGHT:** This protein is a disulfide-linked homodimeric protein after removal of the signal peptide. The reduced monomer consists of 413 amino. rhHVEM-Fc, fused with the Fc region of human IgG1 at the C-terminus and has a calculated MW of 45.4 kDa expressed. Protein migrates as 50-60 kDa in reduced SDS-PAGE resulting from glycosylation.

**ENDOTOXIN LEVEL:** <1 EU/µg by LAL method

**FORM:** Lyophilized

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in 50 mM tris, 100 mM glycine, pH 7.0. Normally Mannitol or Trehalose is added as protectants before lyophilization.

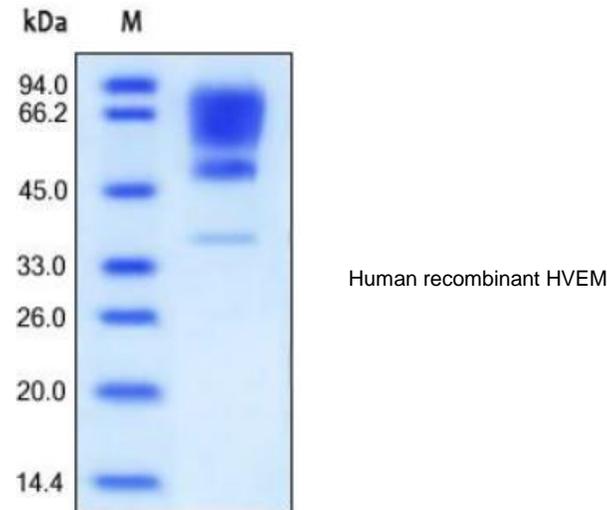
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** Herpesvirus entry mediator (HVEM), also known as TNFRSF14, TR2 (TNF receptor like 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.

**BIOLOGICAL ACTIVITY:** Measured by its ability to inhibit TNF-beta-mediated cytotoxicity using L929 Mouse fibrosarcoma cells. The ED<sub>50</sub> for this effect is typically 2.5-10 µg/ml in the presence of 1 ng/ml of recombinant human TNF-beta.



#### RELATED PRODUCTS:

- TNFRSF6B, human recombinant (Cat # 7329-100)
- Human CellExp™ CD30 /TNFRSF8, human recombinant (Cat # 7389-10)
- Human CellExp™ TNFR1 / TNFRSF1A, human recombinant (Cat # 7382-10, -50)
- Human CellExp™ TNFRSF10B /TRAILR2, human recombinant (Cat # 7448-10)
- Human CellExp™ TNFRSF4/OX40 /CD134, human recombinant (Cat # 7438-10)

**FOR RESEARCH USE ONLY! Not to be used in humans.**