



## **Overview**

Synonyms TNFRSF14, TR2

Herpes Virus Entry Mediator (HVEM) is a transmembrane protein that is the receptor for TNFSF14 (also known as LIGHT) and is therefore referred to asTNFRSF14. HVEM is expressed broadly on immune cells such as T cells, natural killer (NK) cells and

monocytes. The interaction of 3 molecules of LIGHT with three molecules of HVEM forms a hexameric complex that leads to the recruitment and retention of effector cells and activates NK cells to produce large amounts of IFN-3 and GM-CSF. In addition to the canonical binding partner LIGHT, HVEM can also bind to the inhibitory signaling protein

canonical binding partner LIGHT, HVEM can also bind to the inhibitory signaling protein, B- and T- lymphocyte attenuator (BTLA), which suppresses immune responses. Therefore, the HVEM network plays an important role in regulating immunity and the behavior of

lymphocytes.

Recombinant **human HVEM-Fc (rhHVEM-Fc)** produced in *Sf9 insect cells* is a single glycosylated polypeptide chain containing 376 amino acids. A fully biologically active molecule, rhHVEM-Fc has a molecular mass of around 45 kDa analyzed by reducing

SDS-PAGE and is obtained by chromatographic techniques.

**Accession No** Q92956; P01857

**Species** Human

Source Sf9 insect cells

Activity 1: ED50 < 0.1 μg/mL, measured by the neutralization assay using 929 cells in presence of 0.25 ng/mL of human TNF-beta, corresponding to a specific activity of >

1×104 units/mg.

Biological Activity Activity2: Immobilized HVEM-Fc, Human at 2 μg/mL (100 μL/well) can bind biotinylated

BTLA Fc Chimera, Human(Cat.No.Z03441) with a linear range of 0.39–3.13μg/mL. Activity3: Immobilized HVEM-Fc, Human at 2 μg/mL (100 μL/well) can bind biotinylated CD160 Fc Chimera, Human(Cat.No.Z03449) with a linear range of 0.39–3.13 μg/mL.

LPSCKEDEYP VGSECCPKCS PGYRVKEACG ELTGTVCEPC PPGTYIAHLN GLSKCLQCQM CDPAMGLRAS RNCSRTENAV CGCSPGHFCI VQDGDHCAAC RAYATSSPGQ RVQKGGTESQ DTLCQNCPPG TFSPNGTLEE CQHQTKRSCD KTHTCPPCPA PELLGGPSVF LFPPKPKDTL MISRTPEVTC VVVDVSHEDP EVKFNWYVDG VEVHNAKTKP REEQYNSTYR VVSVLTVLHQ

DWLNGKEYKC KVSNKALPAP IEKTISKAKG QPREPQVYTL
PPSRDELTKN QVSLTCLVKG FYPSDIAVEW ESNGQPENNY
KTTPPVLDSD GSFFLYSKLT VDKSRWQQGN VFSCSVMHEA

LHNHYTQKSL SLSPGK

## **Properties**

Sequence

Measured Molecular ~45 kDa, observed by reducing SDS-PAGE.

Purity > 95% by SDS-PAGE and HPLC analyses.

Formulation Lyophilized after extensive dialysis against PBS.

Reconstitution Reconstituted in ddH<sub>2</sub>O at 100 μg/mL. **Endotoxin Level** < 0.2 EU/μg, determined by LAL method.

Lyophilized recombinant human HVEM-Fc (rhHVEM-Fc) remains stable up to 6 months

Storage at lower than -70°C from date of receipt. Upon reconstitution, rhHVEM-Fc remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.

**Note** For research use only

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