

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant HVEM-Fc, Human

Catalog Number: BK0355-10µg

Source: SF9 insect cells

Quantity: 10µg

Description:

Herpes Virus Entry Mediator (HVEM) is a transmembrane protein that is the receptor for TNFSF14 (also known as LIGHT) and is therefore referred to as TNFRSF14. 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- γ and GM-CSF. In addition to the 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 at GenScript.

Molecular Weight:

~45 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% by SDS-PAGE and HPLC analyses.

Biological Activity:

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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

LPSCKEDEYVVGSECCPKCSPGYRVKEAC-
GELTGTVCEPCPPGT-
IAHLNGLSKCLQCQMCDPAMGLRASRNCSTRTE-
NAVCGCSPGHFCIVQGDHCAACRAYATSSPGQR
VQKGGTESQDTLCQNCPPGTFSPNGTLEEC-
QHQTKRCDKTHTCPPCPAPPELLGGPSVFLF-
PPKPKDTLMIS-
RTPEVTCVVVDVSHEDPEVKFNWY-
VDGVEVHNAK-
TKPREEQYNSTYRVVSVLTVLHQDWLNGKEY-
KCKVSNKALPAPIEK-
TISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLV
KGFYPSDIAVEWESNGQPEN-
NYKTTTPVLDSDGS-
FFLYSKLTVDKSRWQQGNVFCSSVM-
HEALHNHYTQKSLSLSPGK

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O at 100 µg/mL.

Storage:

Lyophilized recombinant human HVEM-Fc (rhHVEM-Fc) remains stable up to 6 months at -80 °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.

Usage:

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