

Rev04
 Update: Mar,01,2022

DATASHEET

HVEM-Fc, Human

Cat. No.: Z03224

Product Introduction

Species	Human
Protein Construction	<div> <div>HVEM (Leu39-Lys184) Accession # Q92956</div> <div>hFc</div> </div> <div> <div>N-term</div> <div>C-term</div> </div>
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	Assay #1: ED ₅₀ < 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 > 1.0 × 10 ⁴ units/mg. Assay #2: Immobilized HVEM, hFc, Human at 2.0 μg/ml (100 μl/well) can bind biotinylated human BTLA. Assay #3: Immobilized HVEM, hFc, Human at 2.0 μg/ml (100 μl/well) can bind biotinylated CD160, hFc, Human (Cat. No.: Z03449).
Expression System	Sf9 insect cells
Apparent Molecular Weight	~45 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : 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.

Synonyms : TNFRSF14; TR2

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.