



Recombinant Protein Technical Manual

Recombinant Mouse HVEM/TNFRSF14 Protein (His & Fc Tag)(Active)
RPES4307

Product Data:

Product SKU: RPES4307

Size: 100µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_849262.1

Protein Information:

Molecular Mass: 46.4 kDa

AP Molecular Mass: 65 kDa

Tag: C-His-Fc

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized mouse HVEM-Fc at 10 µg/mL (100 µl/well) can bind biotinylated mouse BTLA-Fc. The EC50 of biotinylated mouse BTLA-Fc is 64-96 ng/mL.

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Tnfrsf14; Herpesvirus entry mediator;HVEM; TR2;TNF receptor-like molecule;ATAR;another TRAF-associated receptor;Tumor necrosis factor receptor superfamily member 14;Atar;HveA

Immunogen Information:

Sequence: Met 1-Gln 206

Background:

Herpesvirus entry mediator (HVEM), also referred to as TNFRSF14, TR2 (TNF receptor-like molecule) and ATAR (another TRAF-associated receptor), is a member of type I transmembrane protein belonging to the TNF-receptor superfamily. It is expressed on many immune cells, including T and B cells, NK cells, monocytes, and neutrophils. Two TNF superfamily ligands lymphotoxin α (TNF- β) and LIGHT (TNFSF14) are identified as cellular ligands for HVEM and initiate the positive signaling. However, recent studies have revealed that HVEM is also involved in the unique inhibitory signaling pathway for T cells through activating tyrosine phosphorylation of the immunoreceptor tyrosine-based inhibitory motif (ITIM) in B and T lymphocyte attenuator (BTLA). HVEM provides a stimulatory signal following engagement with LIGHT (TNFSF14) on T cells. In contrast, it can also provide an inhibitory signal to T cells when it binds the B and T lymphocyte attenuator (BTLA), a ligand member of the Immunoglobulin (Ig) superfamily. Thus, HVEM may be viewed as a molecular switch, capable of facilitating both stimulatory and inhibitory cosignaling in T cells. Substantial evidence from both human disease and from experimental mouse models has indicated that dysregulation of the LIGHT-HVEM-BTLA cosignaling pathway can cause inflammation in the lung and in mucosal tissues.