## Recombinant Human HVEM/TNFRSF14 Protein(His Tag)

Catalog Number: PDMH100338



Note: Centrifuge before opening to ensure complete recovery of vial contents.

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Description	Ц

Species Human

Source Mammalian-derived Human HVEM/TNFRSF14 proteins Leu39-Val202, with an C-

terminal His

 Mol\_Mass
 17.9 kDa

 Accession
 Q92956

**Bio-activity** Not validated for activity

## **Properties**

**Purity** > 90% as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU/mg of the protein as determined by the LAL method

Storage Generally, 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.

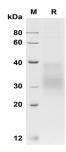
ShippingThis product is provided as lyophilized powder which is shipped with ice packs.FormulationLyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

## Data



SDS-PAGE analysis of Human HVEM/TNFRSF14 proteins,  $2~\mu g/lane~of~Recombinant~Human~HVEM/TNFRSF14\\$  proteins was resolved with SDS-PAGE under reducing

conditions, showing bands at 30-35 KD

## Background

## For Research Use Only

# Recombinant Human HVEM/TNFRSF14 Protein(His Tag)

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Herpes virus 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  $\alpha$  (TNF- $\beta$ ) 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.