

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human HVEM/TNFRSF14 in ELISAs and Western blots. In Western blots, less than 1% cross-reactivity with recombinant human (rh) TNF sRI and rhTNF sRII is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human HVEM/TNFRSF14 Pro37-Val202 (Ser108Thr and Ala140Arg) Accession # Q92956
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human HVEM/TNFRSF14 Fc Chimera (Catalog # 356-HV)
<b>Human HVEM/TNFRSF14 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Human HVEM/TNFRSF14 Antibody (Catalog # MAB356)
<b>ELISA Detection Standard</b>	0.1-0.4 µg/mL	Human HVEM/TNFRSF14 Biotinylated Antibody (Catalog # BAF356) Recombinant Human HVEM/TNFRSF14 Fc Chimera (Catalog # 356-HV)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Herpesvirus entry mediator (HVEM), also referred to as TR2 (TNF receptor-like molecule) and ATAR (another TRAF-associated receptor), is a type I membrane protein belonging to the TNF/NGF receptor superfamily. In the TNF superfamily nomenclature, HVEM is referred to as TNFRSF14. Human HVEM cDNA encodes a 283 amino acid (aa) residue protein with a probable 36 aa residue signal peptide, a 166 aa residue extracellular domain, a 23 aa residue transmembrane region and a 58 aa residue cytoplasmic region. The extracellular domain of HVEM contains several cysteine-rich repeats characteristic of TNF receptor superfamily members. The short cytoplasmic region lacks a death domain present in some TNF receptor family members, but contains a TRAF (TNF receptor-associated factor) interaction domain. HVEM expression has been detected in peripheral blood T cells, B cells, monocytes and in various tissues enriched in lymphoid cells. The extracellular domain of HVEM has been shown to interact directly with the herpes simplex virus envelope glycoprotein D. Two TNF superfamily ligands, including the secreted TNF-β (lymphotoxin α) and the membrane protein LIGHT (lymphotoxins, exhibits inducible expression, and competes with HSV glycoprotein D for HVEM, a receptor expressed by T lymphocytes), have been shown to be the cellular ligands for HVEM. Besides HVEM, LIGHT can also interact with LTβR, the receptor for lymphotoxin αβ heterotrimer. The role of the HVEM-LIGHT/LTβ receptor-ligand pair in immune function and herpesvirus pathobiology remains to be elucidated.

## References:

1. Hsu, H. *et al.* (1997) *J. Biol. Chem.* **272**:13471.
2. Mauri, D.N. *et al.* (1998) *Immunity* **8**:21.
3. Montgomery, R.I. *et al.* (1996) *Cell* **87**:427.