

DESCRIPTION

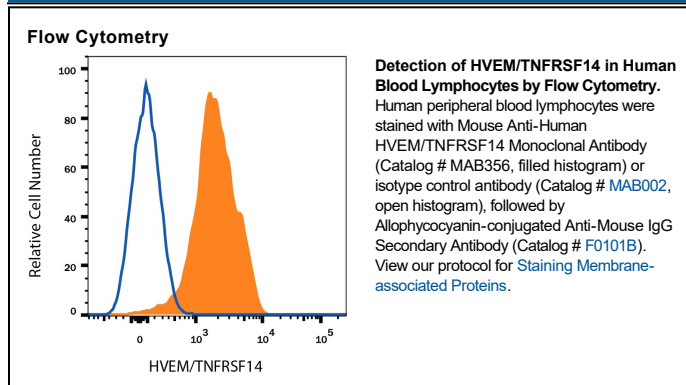
Species Reactivity	Human
Specificity	Detects human HVEM/TNFRSF14 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) CD30 and no cross-reactivity with rh4-1BB, rhCD27, rhCD40, rhDR3, rhDR6, rhFas, rhGITR, rhNGF-R, rhOPG, rhRANK, recombinant mouse (rm) RANK, rhTAJ, rhTNF RI, rhTNF RII, or rmTNF RI is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 94801
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human HVEM/TNFRSF14 Pro37-Val202 (Ser108Thr and Ala140Arg) Accession # AAB58354
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human HVEM/TNFRSF14 Fc Chimera (Catalog # 356-HV)
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Human HVEM/TNFRSF14 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human HVEM/TNFRSF14 Antibody (Catalog # MAB356)
ELISA Detection	0.1-0.4 µg/mL	Human HVEM/TNFRSF14 Biotinylated Antibody (Catalog # BAF356)
Standard		Recombinant Human HVEM/TNFRSF14 Fc Chimera (Catalog # 356-HV)
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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) protein with a probable 36 aa signal peptide, a 166 aa extracellular domain, a 23 aa transmembrane region and a 58 aa 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 LT β R, the receptor for lymphotoxin $\alpha\beta$ heterotrimer.

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.