Human HVEM/TNFRSF14 Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: AF356

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HVEM/TNFRSF14 in direct ELISAs and Western blots. In these formats, less than 1% cross-reactivity with recombinant human (rh) TNF RI, rhTNF RII, and rhNGF R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human HVEM/TNFRSF14 Pro37-Val202 Accession # Q92956
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.

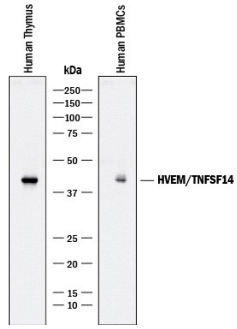
APPLICATIONS

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	See Below
Immunohistochemistry	5-15 µg/mL	See Below

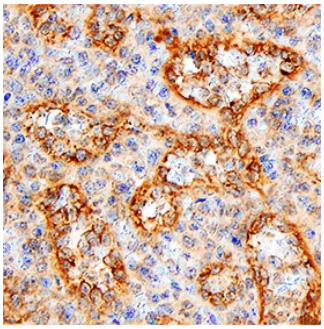
DATA

Western Blot



Detection of Human HVEM/TNFRSF14 by Western Blot. Western blot shows lysates of human thymus tissue and human peripheral blood mononuclear cells (PBMCs). PVDF membrane was probed with 1 µg/mL of Goat Anti-Human HVEM/TNFRSF14 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF356) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for HVEM/TNFRSF14 at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



HVEM/TNFRSF14 in Human Spleen. HVEM/TNFRSF14 was detected in immersion fixed paraffin-embedded sections of human spleen using Goat Anti-Human HVEM/TNFRSF14 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF356) at 10 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell surfaces. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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.** ● 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) 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.

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