

#### Goat Anti-HVEM / TR2 Antibody

Peptide-affinity purified goat antibody Catalog # AF1547a

## **Specification**

## Goat Anti-HVEM / TR2 Antibody - Product Information

Application WB
Primary Accession Q92956

Other Accession NP 003811, 8764

Reactivity
Host
Clonality
Concentration
Conc

Isotype IgG
Calculated MW 30392

# Goat Anti-HVEM / TR2 Antibody - Additional Information

#### **Gene ID 8764**

#### **Other Names**

Tumor necrosis factor receptor superfamily member 14, Herpes virus entry mediator A, Herpesvirus entry mediator A, HveA, Tumor necrosis factor receptor-like 2, TR2, CD270, TNFRSF14, HVEA, HVEM

#### **Format**

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-HVEM / TR2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Goat Anti-HVEM / TR2 Antibody - Protein Information

## Name TNFRSF14 (HGNC:11912)

#### **Function**

Receptor for four distinct ligands: The TNF superfamily members TNFSF14/LIGHT and homotrimeric LTA/lymphotoxin-alpha and the immunoglobulin superfamily members BTLA and CD160, altogether defining a complex stimulatory and inhibitory signaling network (PubMed:<a href="http://www.uniprot.org/citations/9462508" target="\_blank">9462508</a>, PubMed:<a href="http://www.uniprot.org/citations/10754304" target="\_blank">10754304</a>, PubMed:<a



href="http://www.uniprot.org/citations/18193050" target=" blank">18193050</a>, PubMed:<a href="http://www.uniprot.org/citations/23761635" target="blank">23761635</a>). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:<a href="http://www.uniprot.org/citations/19915044" target=" blank">19915044</a>, PubMed:<a href="http://www.uniprot.org/citations/9153189" target=" blank">9153189</a>, PubMed: <a href="http://www.uniprot.org/citations/9162022" target=" blank">9162022</a>). Participates in bidirectional cell-cell contact signaling between antigen presenting cells and lymphocytes. In response to ligation of TNFSF14/LIGHT, delivers costimulatory signals to T cells, promoting cell proliferation and effector functions (PubMed:<a href="http://www.uniprot.org/citations/10754304" target="\_blank">10754304</a>). Interacts with CD160 on NK cells, enhancing IFNG production and anti-tumor immune response (PubMed: <a href="http://www.uniprot.org/citations/23761635" target=" blank">23761635</a>). In the context of bacterial infection, acts as a signaling receptor on epithelial cells for CD160 from intraepithelial lymphocytes, triggering the production of antimicrobial proteins and pro-inflammatory cytokines (By similarity). Upon binding to CD160 on activated CD4+ T cells, down-regulates CD28 costimulatory signaling, restricting memory and alloantigen-specific immune response (PubMed: <a href="http://www.uniprot.org/citations/18193050" target=" blank">18193050</a>). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (PubMed: <a href="http://www.uniprot.org/citations/19915044" target=" blank">19915044</a>) (By similarity). In cis interactions, appears to play an immune regulatory role inhibiting in trans interactions in naive T cells to maintain a resting state. In trans interactions, can predominate during adaptive immune response to provide survival signals to effector T cells (PubMed:<a href="http://www.uniprot.org/citations/19915044" target=" blank">19915044</a>) (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

Widely expressed, with the highest expression in lung, spleen and thymus. Expressed in a subpopulation of B cells and monocytes (PubMed:18193050). Expressed in naive T cells (PubMed:19915044).

## Goat Anti-HVEM / TR2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-HVEM / TR2 Antibody - Images





AF1547a (0.03  $\mu$ g/ml) staining of human thymus lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-HVEM / TR2 Antibody - Background

The protein encoded by this gene is a member of the TNF-receptor superfamily. This receptor was identified as a cellular mediator of herpes simplex virus (HSV) entry. Binding of HSV viral envelope glycoprotein D (gD) to this receptor protein has been shown to be part of the viral entry mechanism. The cytoplasmic region of this receptor was found to bind to several TRAF family members, which may mediate the signal transduction pathways that activate the immune response.

# Goat Anti-HVEM / TR2 Antibody - References

Genetic variants in the prediction of rheumatoid arthritis. van der Helm-van Mil AH, et al. Ann Rheum Dis, 2010 Sep. PMID 20439292.

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.

Cumulative association of 22 genetic variants with seropositive rheumatoid arthritis risk. Karlson EW, et al. Ann Rheum Dis, 2010 Jun. PMID 20233754.

Multiple common variants for celiac disease influencing immune gene expression. Dubois PC, et al. Nat Genet, 2010 Apr. PMID 20190752.

Evidence of epistasis between TNFRSF14 and TNFRSF6B polymorphisms in patients with rheumatoid arthritis. Perdigones N, et al. Arthritis Rheum, 2010 Mar. PMID 20187130.