

## **HVEM / TNFRSF14 Antibody**

Rabbit Polyclonal Antibody Catalog # ABV11778

## **Specification**

### **HVEM / TNFRSF14 Antibody - Product Information**

Application WB, IHC Primary Accession Q92956

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 30392

# **HVEM / TNFRSF14 Antibody - Additional Information**

### **Gene ID 8764**

Positive Control IHC, WB, IFC

Application & Usage IHC: 1 μg/ml; WB: 1-2 μg/ml; IFC: 10 μg/ml

Alias Symbol TNFRSF14

**Other Names** 

TNFRSF14 Antibody: TR2, ATAR, HVEA, HVEM, CD270, LIGHTR, UNQ329/PRO509, Tumor necrosis factor receptor superfamily member 14, Herpes virus entry mediator A, Herpesvirus entry mediator A, tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator)

## **Appearance**

Colorless liquid

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

### **Precautions**

HVEM / TNFRSF14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **HVEM / TNFRSF14 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/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>, PubMed:<a href="http://www.uniprot.org/citations/9462508" target=" blank">9462508</a>). Signals via the 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 (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/19915044" target="\_blank">19915044</a>). 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 (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/19915044" target=" blank">19915044</a>).

#### **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).

# **HVEM / TNFRSF14 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

## **HVEM / TNFRSF14 Antibody - Images**

### **HVEM / TNFRSF14 Antibody - Background**

TNFRSF14 Antibody: Tumor necrosis factor receptor (TNFR) superfamily members are defined by cysteine-rich domains in their extracellular regions that bind TNF-related ligands that share a common structural homology in their extracellular domain. TNFRSF14 was initially identified as the Herpesvirus entry mediator and upon binding to the herpes simplex virus (HSV) envelope glycoprotein D or either of its natural ligands LIGHT and lymphotoxin alpha (LT), activates the transcription factors NF-kB and AP-1. Activation of this signal transduction pathway in T cells





stimulates T cell proliferation and cytokine production, leading to inflammation and enhanced CTL-mediated tumor immunity, suggesting that these proteins may be useful as potential targets for controlling cellular immune responses.