

## **TNFRSF14 Antibody**

Catalog # ASC10410

#### **Specification**

# **TNFRSF14 Antibody - Product Information**

Application WB, IHC-P, IF, E
Primary Accession Q92956

Other Accession
Reactivity
Host
Rabbit

Host Rabbit
Clonality Polyclonal
Isotype IgG

Calculated MW Predicted: 20, 22, 29, 31 kDa

Application Notes

Observed: 23 kDa KDa
TNFRSF14 antibody ca

TNFRSF14 antibody can be used for the detection of TNFRSF14 by Western blot at 1 - 2  $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 1  $\mu$ g/mL. For immunofluorescence start at 10  $\mu$ g/mL.

# **TNFRSF14 Antibody - Additional Information**

Gene ID 8764

**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)

#### **Target/Specificity**

TNFRSF14 antibody was raised against a 15 amino acid synthetic peptide from near the amino terminus of human TNFRSF14.<br/>br><br/>The immunogen is located within amino acids 20 - 70 of TNFRSF14.

#### **Reconstitution & Storage**

TNFRSF14 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

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

#### **TNFRSF14 Antibody - Protein Information**

Name TNFRSF14 (HGNC:11912)

**Function** 



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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).

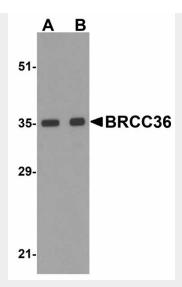
#### **TNFRSF14 Antibody - Protocols**

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

# **TNFRSF14 Antibody - Images**





Western blot analysis of BRCC36 in MCF7 cell lysate with BRCC36 antibody at (A) 0.5 and (B) 1  $\mu$ g/mL.

## **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.

# **TNFRSF14 Antibody - References**

Montgomery RI, Warner MS, Lum BJ, et al. Herpes simplex virus-1 entry into cells mediated by a novel member of the TNF/NGF receptor family. Cell 1996; 87:427-36.

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Marsters SA, Ayres TM, Skubatch M, et al. Herpesvirus entry mediator, a member of the tumor necrosis factor receptor (TNFR) family, interacts with members of the TNFR-associated factor family and activates the transcription factors NF-κB and AP-1. J. Biol. Chem. 1997; 272:14029-32. Mauri DN, Ebner R, Montgomery RI, et al. LIGHT, a new member of the TNF superfamily, and lymphotoxin alpha are ligands for herpesvirus entry mediator. Immunity 1998; 8:21-30.