

**TNFRSF14 Antibody**  
**Catalog # ASC10409****Specification**

---

**TNFRSF14 Antibody - Product Information**

Application	WB, IF, ICC, E
Primary Accession	<a href="#">Q92956</a>
Other Accession	<a href="#">Q92956</a> , <a href="#">8764</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	TNFRSF14 antibody can be used for the detection of TNFRSF14 by Western blot at 2 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/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 16 amino acid synthetic peptide from near the carboxy terminus of human TNFRSF14. The immunogen is located within the last 50 amino acids 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**

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 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 (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**

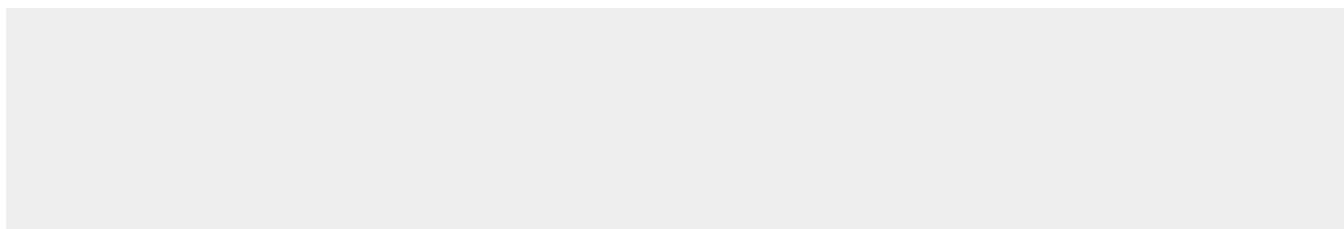
Widely expressed, with the highest expression in lung, spleen and thymus. Expressed in a subpopulation of B cells and monocytes (PubMed:18193050). Expressed in naive T cells (PubMed:19915044).

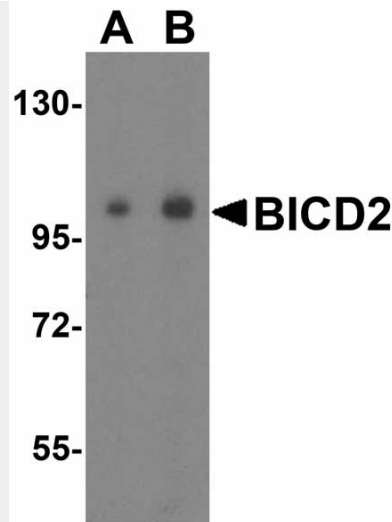
#### **TNFRSF14 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **TNFRSF14 Antibody - Images**





Western blot analysis of BICD2 in 293 cell lysate with BICD2 antibody at (A) 1 and (B) 2 µg/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-κB 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**

- Watts TH. TNF/TNFR family members in costimulation of T cell responses. *Annu. Rev. Immunol.* 2005; 23:23-68.
- 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.
- 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.