

# **TNFRSF14 Blocking Peptide (C-term)**

Synthetic peptide Catalog # BP21380b

## **Specification**

# TNFRSF14 Blocking Peptide (C-term) - Product Information

Primary Accession

**092956** 

# TNFRSF14 Blocking Peptide (C-term) - 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

## Target/Specificity

The synthetic peptide sequence is selected from aa 269-282 of HUMAN TNFRSF14

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# TNFRSF14 Blocking Peptide (C-term) - 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>, 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).

## TNFRSF14 Blocking Peptide (C-term) - Protocols

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

# Blocking Peptides

TNFRSF14 Blocking Peptide (C-term) - Images

# TNFRSF14 Blocking Peptide (C-term) - Background

Receptor for BTLA. Receptor for TNFSF14/LIGHT and homotrimeric TNFSF1/lymphotoxin-alpha. Involved in lymphocyte activation. Plays an important role in HSV pathogenesis because it enhanced the entry of several wild-type HSV strains of both serotypes into CHO cells, and mediated HSV entry into activated human T-cells.

## TNFRSF14 Blocking Peptide (C-term) - References

Montgomery R.I.,et al.Cell 87:427-436(1996). Kwon B.S.,et al.J. Biol. Chem. 272:14272-14276(1997). Zhang W.,et al.Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases. Struyf F.,et al.J. Infect. Dis. 185:36-44(2002). Ota T.,et al.Nat. Genet. 36:40-45(2004).