

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:9462508, PubMed:10754304, PubMed:18193050, PubMed:23761635). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:19915044, PubMed:9153189, PubMed:9162022, PubMed:9162022). 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:10754304). Interacts with CD160 on NK cells, enhancing IFNG production and anti-tumor immune response (PubMed:23761635). 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:18193050). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (PubMed:19915044) (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:19915044) (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).