

TNFRSF14 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9094c

Specification

TNFRSF14 Antibody (Center) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>092956</u> Human Rabbit Polyclonal Rabbit IgG 210-236

TNFRSF14 Antibody (Center) - 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

This TNFRSF14 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 210-236 amino acids from the Central region of human TNFRSF14.

Dilution WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

TNFRSF14 Antibody (Center) - 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:<u>10754304</u>, PubMed:<u>18193050</u>, PubMed:<u>23761635</u>, PubMed:<u>9462508</u>). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:<u>19915044</u>, PubMed:<u>9153189</u>, PubMed:<u>9162022</u>). 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:<u>18193050</u>). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (By similarity) (PubMed: 19915044). 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: 19915044).

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).

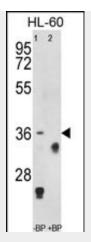
TNFRSF14 Antibody (Center) - Protocols

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

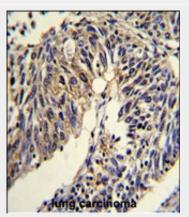
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TNFRSF14 Antibody (Center) - Images

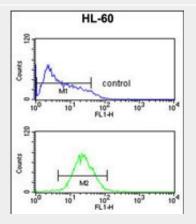




Western blot analysis of anti-TNFRSF14 Antibody (Center) Pab (Cat. #AP9094c) pre-incubated without(lane 1) and with(lane 2) blocking peptide in HL-60 cell line lysate. TNFRSF14 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with TNFRSF14 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



TNFRSF14 Antibody (Center) (Cat. #AP9094c) flow cytometric analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TNFRSF14 Antibody (Center) - Background

TNFRSF14 is a member of the TNF-receptor superfamily. This receptor was identified as a cellular



mediator of herpes simplex virus (HSV) entry. Binding of HSV viral envelope glycoprotein D (gD) to this receptor protein has been shown to be part of the viral entry mechanism. The cytoplasmic region of this receptor was found to bind to several TRAF family members, which may mediate the signal transduction pathways that activate the immune response.

TNFRSF14 Antibody (Center) - References

Dubois,P.C., et.al., Nat. Genet. 42 (4), 295-302 (2010) Davila,S., et.al., Genes Immun. (2010) In press