

TNFRSF14 Rabbit pAb

Catalog # AP98157

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q92956
Other Accession	Q92956
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30392
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TNFRSF14
Epitope Specificity	51-150/283
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 3 TNFR-Cys repeats.
SUBUNIT	Interacts with TRAF2, TRAF3 and TRAF5. Interacts with herpes simplex virus 1 (HHV-1) and herpes simplex virus 1 (HHV-2) envelope glycoprotein D; functions as an entry receptor for these viruses.
Post-translational modifications	N-glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	TNFRSF14 is a type I membrane protein belonging to the TNF receptor superfamily. This receptor mediates herpes virus entry into cells during infection. TNFRSF14 is able to inhibit the proliferation, activation, and cytokine production of T cells. It has an extracellular domain containing several cysteine-rich repeats and a short cytoplasmic region containing a TRAF (TNF receptor-associated factor) interaction domain. The extracellular domain of TNFRSF14 interacts with the herpes simplex virus envelope glycoprotein D. TNFRSF14 binds two cellular ligands: lymphotoxin alpha and LIGHT. LIGHT is a transmembrane protein expressed and shed from the surface of activated T cells, exhibits inducible expression, and competes with HSV glycoprotein D for HVEM, a receptor expressed by T lymphocytes. The LIGHT:TNFRSF14 interaction controls immune response functions by cell death induction as well as cell activation. TNFRSF14 is expressed by peripheral blood T cells, B cells, monocytes and in various tissues enriched in lymphoid cells.

Additional Information

Gene ID	8764
Other Names	ATAR; CD270; HVEA; HVEM; LIGHTR; TR2; Tnfrs14; TNR14_HUMAN; TNFRSF14; Herpes virus entry mediator A (Herpesvirus entry mediator A HveA); Tumor necrosis factor receptor-like 2 (TR2); TNF receptor superfamily member 14; tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry

mediator); tumor necrosis factor receptor superfamily, member 14;
herpesvirus entry mediator

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500
0-10000

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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:[10754304](#), PubMed:[18193050](#), PubMed:[23761635](#), PubMed:[9462508](#)). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:[19915044](#), PubMed:[9153189](#), 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 (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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.