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TNFRSF14 Rabbit pAb

Catalog # AP98157

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q92956
Other Accession	Q92956
Reactivity	Human
Predicted	Dog, Horse
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=1:5000-10000
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'.