

CRTAM Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58254

Product Information

Application IHC-F, IF, ICC, E

Primary Accession
Reactivity
Rat, Pig
Host
Clonality
Polyclonal
Calculated MW
Physical State

O95727
Rat, Pig
Rabbit
Polyclonal
44641
Liquid

Immunogen KLH conjugated synthetic peptide derived from human CRTAM

Epitope Specificity 31-130/393 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Membrane; Single-pass type I membrane protein (Potential).

SIMILARITY Belongs to the nectin family.Contains 1 Ig-like C2-type (immunoglobulin-like)

domain.Contains 1 Ig-like V-type (immunoglobulin-like) domain.

SUBUNIT Interacts with CADM1.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions CRTAM, (class-I MHC-restricted T-cell associated molecule), is an

immunoglobulin-superfamily transmembrane protein and a new member of the nectin-like (Necls) family. In the immune system, CRTAM expression has been shown to be restricted to activated class-I MHC-restricted T cells, including NKT and CD8 T cells. CRTAM interacts with CADM1 and promotes natural killer (NK) cell cytotoxicity and interferon-gamma (IFN-gamma) secretion by CD8+ cells in vitro, as well as NK cell-mediated rejection of tumors expressing CADM3 in vivo. Nectin-like (Necl) molecule 2, has been identified as a ligand of CRTAM. Necl2/CRTAM molecular pair could regulate a large panel of cell/cell interactions both within and outside of the immune

system.

Additional Information

Gene ID 56253

Other Names Cytotoxic and regulatory T-cell molecule, Class-I MHC-restricted

T-cell-associated molecule, CD355, CRTAM {ECO:0000312 | EMBL:AAC80267.1}

Target/Specificity In the immune system, expression is restricted to activated class-I

MHC-restricted cells, including NKT and CD8 cells. Strongly expressed in spleen, thymus, small intestine, peripheral blood leukocyte, and in Purkinje neurons in cerebellum. Expressed at much lower levels in testis, ovary, colon,

lung and lymphoid tissues.

Dilution IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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 CRTAM {ECO:0000312 | EMBL:AAC80267.1}

Function Mediates heterophilic cell-cell adhesion which regulates the activation, differentiation and tissue retention of various T-cell subsets (By similarity).

Interaction with CADM1 promotes natural killer (NK) cell cytotoxicity and IFNG/interferon-gamma secretion by CD8+ T- cells in vitro as well as NK

cell-mediated rejection of tumors expressing CADM1 in vivo

(PubMed:15811952). Regulates CD8+ T-cell proliferation in response to T-cell receptor (TCR) activation (By similarity). Appears to be dispensable for CD8+ T-cell-mediated cytotoxicity (By similarity). Interaction with SCRIB promotes the late phase of cellular polarization of a subset of CD4+ T-cells, which in turn regulates TCR-mediated proliferation and IFNG, IL17 and IL22 production (By similarity). By interacting with CADM1 on CD8+ dendritic cells, regulates the retention of activated CD8+ T-cells within the draining lymph node (By similarity). Required for the intestinal retention of intraepithelial CD4+ CD8+ T-cells and, to a lesser extent, intraepithelial and lamina propria CD8+ T-cells and CD4+ T-cells (By similarity). Interaction with CADM1 promotes the adhesion to gut- associated CD103+ dendritic cells, which may facilitate the

expression of gut-homing and adhesion molecules on T-cells and the conversion of CD4+ T-cells into CD4+ CD8+ T-cells (By similarity).

Cellular Location Cell membrane {ECO:0000250 | UniProtKB:Q149L7}; Single-pass type I

membrane protein. Note=In a subset of CD4+ T-cells, colocalizes with SCRIB at the immunological synapse during the late phase of T-cell activation

{ECO:0000250 | UniProtKB:Q149L7}

Tissue Location In the immune system, expression is restricted to activated class-I

MHC-restricted cells, including NKT and CD8 T-cells (PubMed:10811014, PubMed:15811952, PubMed:16300832). Strongly expressed in spleen, thymus, small intestine, peripheral blood leukocyte, and in Purkinje neurons in cerebellum. Expressed at much lower levels in testis, ovary, colon, lung and

lymphoid tissues (PubMed:16300832)

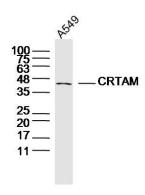
Images

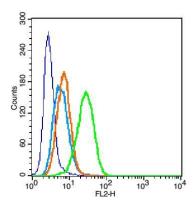
Sample: A549 Cell (Human) Lysate at 40 ug Primary: Anti-CRTAM (AP58254) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 42 kD Observed band size: 42 kD





Blank control(blue): U937 (fixed with 2% paraformaldehyde (10 min)).
Primary Antibody:Rabbit Anti-CRTAM antibody(AP58254), Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

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