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CRTAM Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58254

Specification

CRTAM Polyclonal Antibody - Product Information

Application	**IHC-F, IF, ICC, E**
Primary Accession	O95727
Reactivity	**Rat, Pig**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**42 KDa**
Physical State	**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.

CRTAM Polyclonal Antibody - 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~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

CRTAM Polyclonal Antibody - 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)

CRTAM Polyclonal Antibody - Protocols

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

- Western Blot

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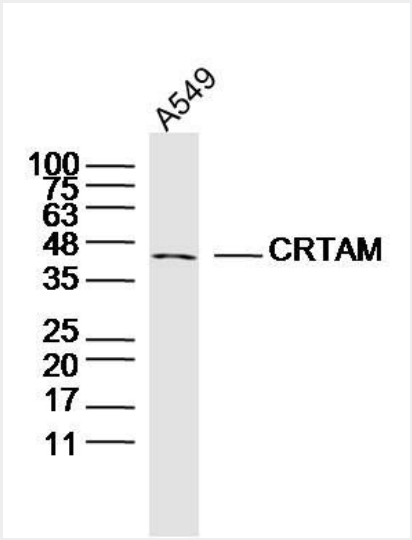
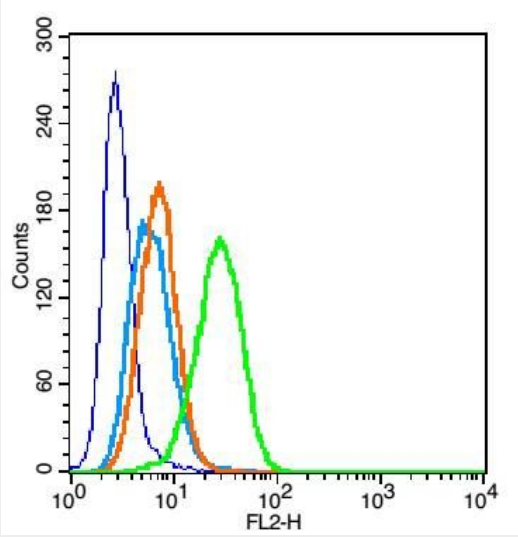
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CRTAM Polyclonal Antibody - Images



Sample: A549 Cell (Human) Lysate at 40 ug
Primary: Anti-CRTAM (bs-4957R) 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(bs-4957R), 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.