

## Anti-CD69 Antibody

Rabbit polyclonal antibody to CD69 Catalog # AP60663

### Specification

# Anti-CD69 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>Q07108</u> <u>P37217</u> Human, Mouse, Rat Rabbit Polyclonal 22559

## **Anti-CD69 Antibody - Additional Information**

Gene ID 969

**Other Names** 

CLEC2C; Early activation antigen CD69; Activation inducer molecule; AIM; BL-AC/P26; C-type lectin domain family 2 member C; EA1; Early T-cell activation antigen p60; GP32/28; Leukocyte surface antigen Leu-23; MLR-3; CD69

Target/Specificity Recognizes endogenous levels of CD69 protein.

Dilution WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# **Anti-CD69 Antibody - Protein Information**

Name CD69

Synonyms CLEC2C

#### Function

Transmembrane protein expressed mainly on T-cells resident in mucosa that plays an essential role in immune cell homeostasis. Rapidly expressed on the surface of platelets, T-lymphocytes and NK cells upon activation by various stimuli, such as antigen recognition or cytokine signaling, stimulates different signaling pathways in different cell types (PubMed:<a href="http://www.uniprot.org/citations/24752896" target="\_blank">24752896</a>, PubMed:<a



href="http://www.uniprot.org/citations/26296369" target="\_blank">26296369</a>, PubMed:<a href="http://www.uniprot.org/citations/35930205" target="\_blank">35930205</a>). Negatively regulates Th17 cell differentiation through its carbohydrate dependent interaction with galectin-1/LGALS1 present on immature dendritic cells (PubMed:<a

href="http://www.uniprot.org/citations/24752896" target="\_blank">24752896</a>). Association of CD69 cytoplasmic tail with the JAK3/STAT5 signaling pathway regulates the transcription of RORgamma/RORC and, consequently, differentiation toward the Th17 lineage (By similarity). Also acts via the S100A8/S100A9 complex present on peripheral blood mononuclear cells to promote the conversion of naive CD4 T-cells into regulatory T-cells (PubMed:<a

href="http://www.uniprot.org/citations/26296369" target="\_blank">26296369</a>). Acts as an oxidized low-density lipoprotein (oxLDL) receptor in CD4 T- lymphocytes and negatively regulates the inflammatory response by inducing the expression of PDCD1 through the activation of NFAT (PubMed:<a href="http://www.uniprot.org/citations/35930205" target="\_blank">35930205</a>). Participates in adipose tissue-derived mesenchymal stem cells (ASCs)-mediated protection against P.aeruginosa infection. Mechanistically, specifically recognizes P.aeruginosa to promote ERK1 activation, followed by granulocyte-macrophage colony-stimulating factor (GM-CSF) and other inflammatory cytokines secretion (PubMed:<a href="http://www.uniprot.org/citations/34841721" target="\_blank">34841721</a>). In eosinophils, induces IL-10 production through the ERK1/2 pathway (By similarity). Negatively regulates the chemotactic responses of effector lymphocytes and dendritic cells (DCs) to sphingosine 1 phosphate/S1P by acting as a S1PR1 receptor agonist and facilitating the internalization and degradation of the receptor (PubMed:<a href="http://www.uniprot.org/citations/37039481" target=" blank">37039481</a>).

### **Cellular Location**

Cell membrane; Single-pass type II membrane protein

### **Tissue Location**

Expressed on the surface of activated T-cells, B- cells, natural killer cells, neutrophils, eosinophils, epidermal Langerhans cells and platelets

### Anti-CD69 Antibody - 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>

Anti-CD69 Antibody - Images





Western blot analysis of CD69 expression in HEK293T (A), Hela (B), H446 (C), mouse lung (D), rat lung (E), rat heart (F) whole cell lysates.

## Anti-CD69 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD69. The exact sequence is proprietary.