

Anti-CD69 Antibody

Rabbit polyclonal antibody to CD69 Catalog # AP60663

Specification

Anti-CD69 Antibody - Product Information

Application WB
Primary Accession Q07108
Other Accession P37217
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 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:24752896, PubMed:<a



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

href="http://www.uniprot.org/citations/24752896" target="_blank">24752896). 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). Acts also 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:26296369). 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:35930205). 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:34841721). 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: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

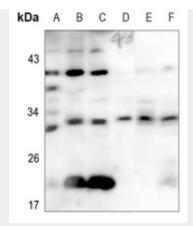
Anti-CD69 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.