

# CD69 Polyclonal Antibody

Catalog # AP68956

#### **Product Information**

Application WB Primary Accession Q07108

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW22559

## **Additional Information**

Gene ID 969

Other Names CD69; 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; CD

antigen CD69

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **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: 26296369, PubMed: 35930205). Negatively regulates Th17 cell differentiation through its carbohydrate dependent interaction with galectin-1/LGALS1 present on immature dendritic cells (PubMed: 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). 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: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).

**Cellular Location** 

Cell membrane; Single-pass type II membrane protein

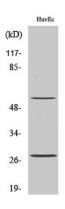
**Tissue Location** 

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

# **Background**

Involved in lymphocyte proliferation and functions as a signal transmitting receptor in lymphocytes, natural killer (NK) cells, and platelets.

## **Images**



Western Blot analysis of various cells using CD69 Polyclonal Antibody diluted at 1: 1000

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