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CD69 Polyclonal Antibody

Catalog # AP73646

Product Information

Application	WB
Primary Accession	Q07108
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22559

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; CD69
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. 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℃

Protein Information

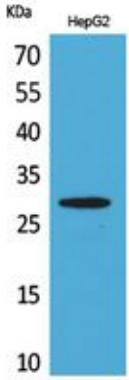
Name	CD69
Synonyms	CLEC2C
Function	Transmembrane protein expressed mainly on T-cells resident in mucosa that plays an essential role in immune cell homeostasis. Rapidly expressed on the surface of platelets, T-lymphocytes and NK cells upon activation by various stimuli, such as antigen recognition or 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 HepG2 cells using CD69 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000