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CD69 Recombinant Rabbit mAb

Catalog # AP100069

Product Information

Application	WB, IHC-P, IHC-F, IF, IP, E
Primary Accession	Q07108
Other Accession	Q07108
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	22559
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CD69
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.22 □m filtered solution in 20mM hepes7.4, 150mm NaCl, 50% glycerin,0.03% proclin.
SIMILARITY	Contains 1 C-type lectin domain.
SUBUNIT	Homodimer; disulfide-linked.
Post-translational modifications	Constitutive Ser/Thr phosphorylation in both mature thymocytes and activated T-lymphocytes.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the calcium dependent lectin superfamily of type II transmembrane receptors. Expression of the encoded protein is induced upon activation of T lymphocytes, and may play a role in proliferation. Furthermore, the protein may act to transmit signals in natural killer cells and platelets. [provided by RefSeq, Aug 2011]

Additional Information

Gene ID	969
Other Names	AIM; BL-AC/P26; CLEC2C; EA1; GP32/28; MLR-3; 5830438K24Rik; VEA; CD69_HUMAN; CD69; Activation inducer molecule (AIM); C-type lectin domain family 2 member C; Early T-cell activation antigen p60; Leukocyte surface antigen Leu-23; CD69_MOUSE; CD69 molecule; CD69 antigen (p60, early T-cell activation antigen)
Dilution	WB=1:200-1000,IHC-P=1:100-500,IHC-F=1:200-1000,IF=1:200-1000,IP=1:50-200,ELISA=1:5000-20000
Storage	Store at -20 °C 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 °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

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