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Recombinant Anti-CD247 Rabbit mAb

Catalog # AP95008

Product Information

Application	WB, FC, IF/IC
Primary Accession	P20963
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	18696

Additional Information

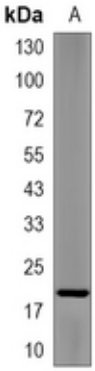
Gene ID	919
Other Names	CD3Z; T3Z; TCRZ; T-cell surface glycoprotein CD3 zeta chain; T-cell receptor T3 zeta chain; CD247
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human CD247 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

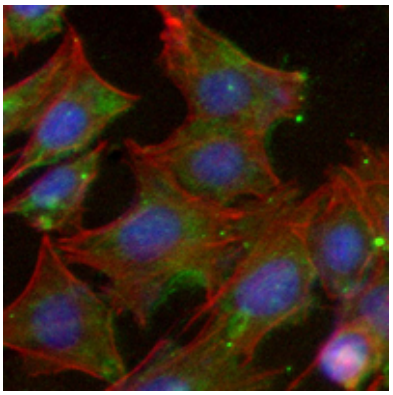
Name	CD247
Synonyms	CD3Z, T3Z, TCRZ
Function	Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR- mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD247/CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed:1384049, PubMed:1385158, PubMed:2470098, PubMed:7509083). CD247/CD3Z ITAMs phosphorylation creates multiple docking sites for the protein kinase ZAP70 leading to ZAP70 phosphorylation and its conversion into a catalytically active enzyme (PubMed:7509083). Plays an important role in intrathymic T-cell differentiation. Additionally, participates in the activity-dependent synapse formation of retinal ganglion cells (RGCs) in both

	the retina and dorsal lateral geniculate nucleus (dLGN) (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P24161}; Single-pass type I membrane protein
Tissue Location	Expressed in normal lymphoid tissue and in peripheral blood mononuclear cells (PBMCs) (PubMed:11722641)

Images



Western blot analysis of CD247 expression in Jurkat (A) whole cell lysates. (Predicted band size: 19 kD; Observed band size: 19 kD)



Immunofluorescent analysis of CD247 staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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