

Rabbit CD247 Polyclonal Antibody | anti-CD247 antibody

CD247 Antibody

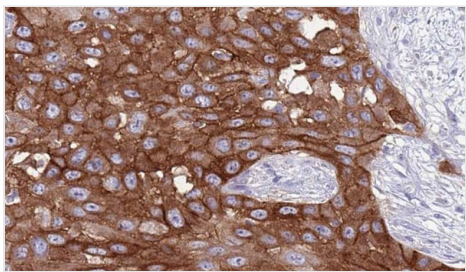
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326550	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

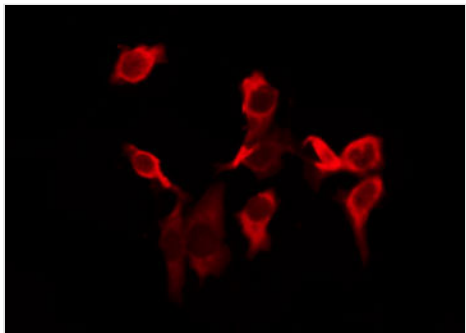
CD247; Polyclonal Antibody; CD247 Antibody; 4930549J05Rik; A430104F18Rik; AW552088; CD247 antigen; Cd247 molecule; Cd3; CD3 antigen; zeta polypeptide; isoform CRA_b; zeta subunit; CD3-eta; CD3H; CD3Q; Cd3z; CD3Z antigen zeta polypeptide (TiT3 complex); CD3Z_HUMAN; CD3zeta; CD3zeta chain; MGC140430; T cell receptor T3 zeta chain; T cell surface glycoprotein CD3 zeta chain; T-cell antigen receptor complex; zeta subunit of CD3; T-cell receptor T3 zeta chain; T-cell surface glycoprotein CD3 zeta chain; T3z; TCR zeta chain; TCRk; TCRZ; TCRzeta; anti-CD247 antibody

PRODUCT SPECIFICATIONS

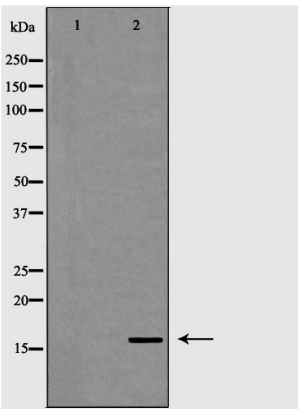
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CD247 antibody detects endogenous levels of total CD247
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	163
Applicable Applications for anti-CD247 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CD247
Subcellular Location	Membrane.
Tissue Specificity	CD3Z is expressed in normal lymphoid tissue and in peripheral blood mononuclear cells (PBMCs) (PubMed:11722641).
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemisry)
AAA326550 at 1/100 staining Human Head and neck cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)
AAA326550 staining Hela by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of extracts of Jurkat, using CD247 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CD247 antibody	Description: The protein encoded by this gene is T-cell receptor zeta, which together with T-cell receptor alpha/beta and gamma/delta heterodimers, and with CD3-gamma, -delta and -epsilon, forms the T-cell receptor-CD3 complex. The zeta chain plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. Low expression of the antigen results in impaired immune response. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008] 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 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:2470098, PubMed:7509083). 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). Subunit Structure: The TCR-CD3 complex is composed of a CD3D/CD3E and a CD3G/CD3E heterodimers that preferentially associate with TCRalpha and TCRbeta, respectively, to form TCRalpha/CD3E/CD3G and TCRbeta/CD3G/CD3E trimers. In turn, the hexamer interacts with CD3Z homodimer to form the TCR-CD3 complex. Alternatively, TCRalpha and TCRbeta can be replaced by TCRgamma and TCRdelta (PubMed:17055436). Interacts with SLA (PubMed:10449770). Interacts with TRAT1 (PubMed:11390434). Interacts with DOCK2 (PubMed:12176041). Interacts with SLA2. Interacts with SHB (PubMed:9484780). Interacts with ZAP70 (PubMed:26783323, PubMed:7659156). Interacts (tyrosine phosphorylated) with SHC1 (via SH2 domain) (PubMed:7544002). Interacts with PTPRC (PubMed:15684325). Interacts with CRK; this interaction regulates CD3Z phosphorylation (PubMed:28465009). Post-translational Modifications: Phosphorylated on Tyr residues after T-cell receptor triggering by LCK in association with CD4/CD8. Similarity: The ITAM domains mediate interaction with SHB. Belongs to the CD3Z/FCER1G family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4557431
NCBI GeneID	919
NCBI Accession #	NP_000725.1
NCBI GenBank Nucleotide #	NM_000734.3
UniProt Accession #	P20963; Q5VX13; Q8TAX4; B1AK49; A46461
Molecular Weight	Observed: 16 kDa Predicted: 19 kDa
NCBI Official Full Name	T-cell surface glycoprotein CD3 zeta chain isoform 2
NCBI Official Synonym Full Names	CD247 molecule
NCBI Official Symbol	CD247
NCBI Official Synonym Symbols	T3Z; CD3H; CD3Q; CD3Z; TCRZ; IMD25; CD3-ZETA
NCBI Protein Information	T-cell surface glycoprotein CD3 zeta chain
UniProt Protein Name	T-cell surface glycoprotein CD3 zeta chain
UniProt Gene Name	CD247
UniProt Synonym Gene Names	CD3Z; T3Z; TCRZ

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.