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Goat Anti-CD3-ZETA / CD247 Antibody (internal region)

Purified Goat Polyclonal Antibody
Catalog # AF4192a

Specification

Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	P20963
Other Accession	NP_932170.1, NP_000725.1
Reactivity	**Human**
Predicted	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5**
Calculated MW	**18696**

Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - Additional Information

Gene ID 919

Other Names
CD247; CD247 molecule; CD3-ZETA; CD3H; CD3Q; CD3Z; T3Z; TCRZ; CD247 antigen, zeta subunit; CD3Z antigen, zeta polypeptide (TiT3 complex); CD3zeta chain; T-cell antigen receptor complex, zeta subunit of CD3; T-cell receptor T3 zeta chain; T-cell surface glycoprotein CD3 zeta chain; TCR zeta chain

Format
Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen
Peptide with sequence C-KNPQEGLYNELQKD, from the internal region of the protein sequence according to NP_932170.1; NP_000725.1.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-CD3-ZETA / CD247 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - 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 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).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:P24161}; Single-pass type I membrane protein

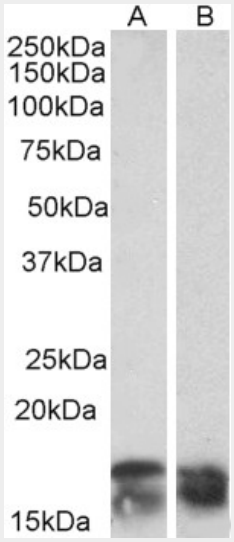
Tissue Location
CD3Z is expressed in normal lymphoid tissue and in peripheral blood mononuclear cells (PBMCs) (PubMed:11722641)

Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - Images



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AF4192a (0.03 µg/ml) staining of Human Tonsil (A) and Jurkat (B) lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - References

Association of CD247 polymorphisms with rheumatoid arthritis: a replication study and a meta-analysis. Teruel M, McKinney C, Balsa A, Pascual-Salcedo D, Rodriguez-Rodriguez L, Ortiz AM, Gómez-Vaquero C, González-Gay MA, Smith M, Witte T, Merriman T, Lie BA, Martin J. PloS one 2013 8 (7): e68295.