

**Goat Anti-CD3-ZETA / CD247 Antibody (internal region)**  
**Purified Goat Polyclonal Antibody**  
**Catalog # AF4192a**

**Specification**

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

Application	<b>WB</b>
Primary Accession	<a href="#">P20963</a>
Other Accession	<a href="#">NP_932170.1</a> , <a href="#">NP_000725.1</a>
Reactivity	<b>Human</b>
Predicted	<b>Human</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Concentration	<b>0.5</b>
Calculated MW	<b>18696</b>

**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:<a href="http://www.uniprot.org/citations/1384049" target="\_blank">1384049</a>, PubMed:<a href="http://www.uniprot.org/citations/1385158" target="\_blank">1385158</a>, PubMed:<a href="http://www.uniprot.org/citations/2470098" target="\_blank">2470098</a>, PubMed:<a href="http://www.uniprot.org/citations/7509083" target="\_blank">7509083</a>). 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:<a href="http://www.uniprot.org/citations/7509083" target="\_blank">7509083</a>). 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)

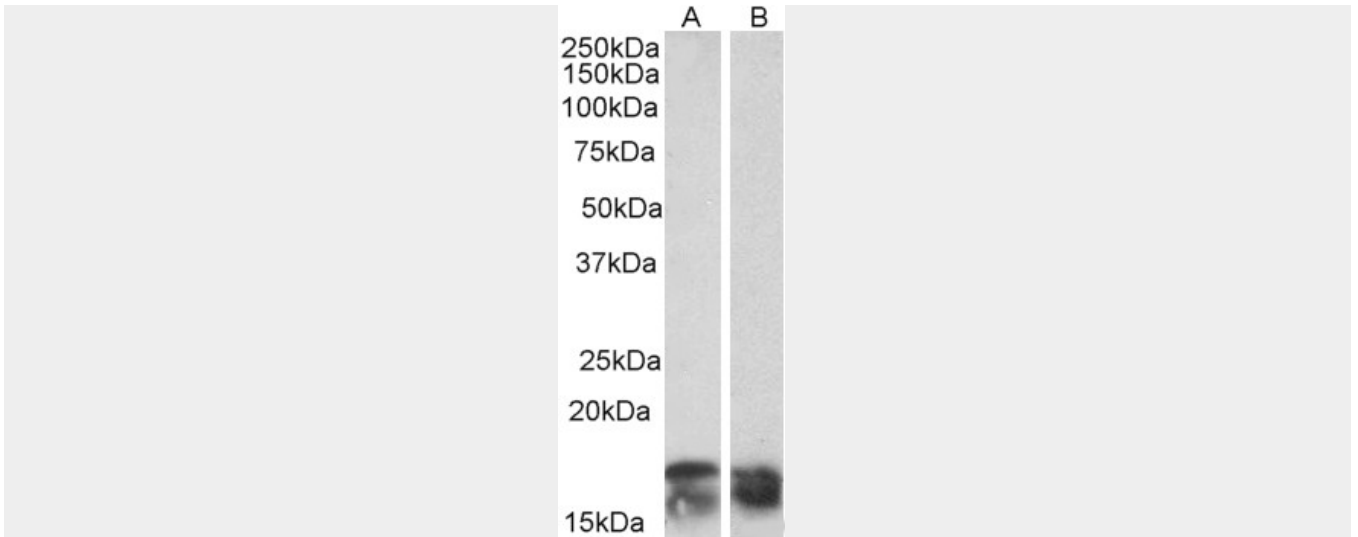
## Goat Anti-CD3-ZETA / CD247 Antibody (internal region) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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





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.