

# CD3 zeta Rabbit mAb

Catalog # AP78676

## Product Information

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<b>Application</b>	WB, IF, FC, ICC
<b>Primary Accession</b>	<a href="#">P20963</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Isotype</b>	IgG
<b>Conjugate</b>	Unconjugated
<b>Immunogen</b>	A synthesized peptide derived from human CD3 zeta
<b>Purification</b>	Affinity Chromatography
<b>Calculated MW</b>	18696

## Additional Information

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<b>Gene ID</b>	919
<b>Other Names</b>	CD247
<b>Dilution</b>	WB~~1:1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A
<b>Format</b>	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	CD247
<b>Synonyms</b>	CD3Z, T3Z, TCRZ
<b>Function</b>	<p>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="#">1384049</a>, PubMed:<a href="#">1385158</a>, PubMed:<a href="#">2470098</a>, PubMed:<a href="#">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="#">7509083</a>). Plays an important role in intrathymic T-cell</p>

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)

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