

# CD3D Rabbit mAb

Catalog # AP75228

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IP, ICC
<b>Primary Accession</b>	<a href="#">P04234</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Calculated MW</b>	18930

## Additional Information

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<b>Gene ID</b>	915
<b>Other Names</b>	CD3D
<b>Dilution</b>	WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A IP~~N/A ICC~~N/A
<b>Format</b>	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<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>	CD3D
<b>Synonyms</b>	T3D
<b>Function</b>	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: <a href="#">2470098</a> ). In addition of this role of signal transduction in T- cell activation, CD3D plays an essential role in thymocyte differentiation. Indeed, participates in correct intracellular TCR-CD3 complex assembly and surface expression. In absence of a functional TCR-CD3 complex, thymocytes are unable to differentiate properly. Interacts with CD4 and CD8 and thus serves to establish a functional link between the TCR and coreceptors CD4 and CD8, which is needed for activation and positive selection of CD4 or CD8 T-cells (PubMed: <a href="#">12215456</a> ).

**Cellular Location**

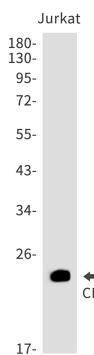
Cell membrane; Single-pass type I membrane protein

**Tissue Location**

CD3D is mostly present on T-lymphocytes with its TCR-CD3 partners. Present also in fetal NK-cells

**Images**

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