

CD3D Rabbit mAb
Catalog # AP77585**Specification**

CD3D Rabbit mAb - Product Information

Application	WB, IHC, IF
Primary Accession	P04234
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	18930

CD3D Rabbit mAb - Additional Information

Gene ID 915

Other Names

CD3D

Dilution

WB~~1/500-1/1000

IHC~~1/50-1/100

IF~~1/50-1/200

Format

Liquid

CD3D Rabbit mAb - Protein Information

Name CD3D

Synonyms T3D

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](http://www.uniprot.org/citations/2470098)). 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: [12215456](http://www.uniprot.org/citations/12215456)).

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

CD3D Rabbit mAb - 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](#)

CD3D Rabbit mAb - Images

