

**Anti-CD3D Rabbit Monoclonal Antibody**  
**Catalog # ABO13487****Specification****Anti-CD3D Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	<a href="#">P04234</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-CD3D Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human.

**Anti-CD3D Rabbit Monoclonal Antibody - Additional Information****Gene ID** 915**Other Names**

T-cell surface glycoprotein CD3 delta chain, T-cell receptor T3 delta chain, CD3d, CD3D, T3D

**Calculated MW**

18930 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Subcellular Localization**

Membrane; Single-pass type I membrane protein.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human CD3D

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-CD3D Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/2470098" target="\_blank">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="http://www.uniprot.org/citations/12215456" target="\_blank">12215456</a>).

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**Tissue Location**

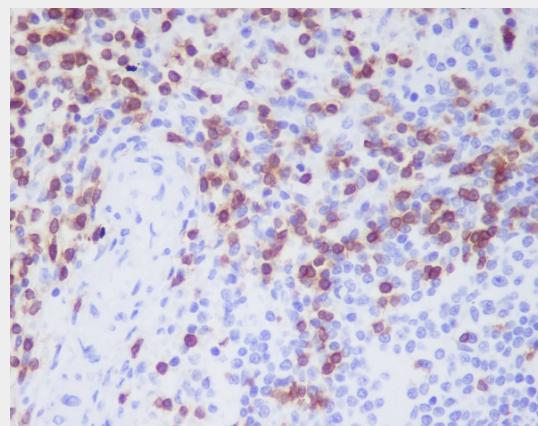
CD3D is mostly present on T-lymphocytes with its TCR-CD3 partners. Present also in fetal NK-cells

**Anti-CD3D Rabbit Monoclonal Antibody - Protocols**

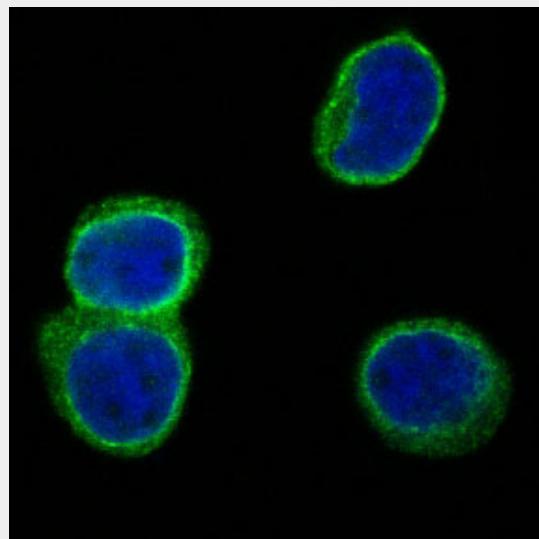
Provided below are standard protocols that you may find useful for product applications.

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

**Anti-CD3D Rabbit Monoclonal Antibody - Images**



Immunohistochemical analysis of paraffin-embedded human spleen, using CD3D Antibody.



Immunofluorescent analysis of Jurkat cells, using CD3D Antibody.