10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD3d Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53292

Specification

CD3d Antibody - Product Information

Application	**WB**
Primary Accession	P04234
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**19 KDa**
Antigen Region	**52-101**

CD3d Antibody - Additional Information

Gene ID 915

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

Target/Specificity
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD3d. The exact sequence is proprietary.

Dilution
WB~~ 1:500

Format
Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

Storage
Store at -20 °C.Stable for 12 months from date of receipt

CD3d 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: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).

Cellular Location
Cell membrane; Single-pass type I membrane protein

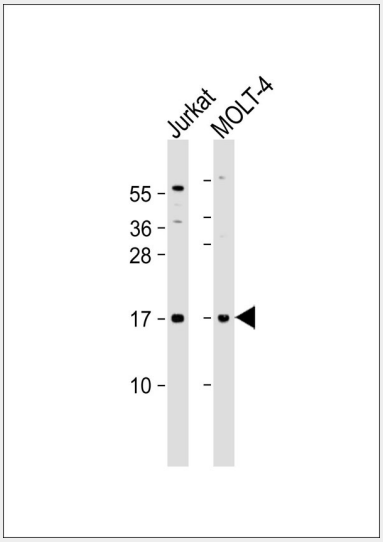
Tissue Location
CD3D is mostly present on T-lymphocytes with its TCR-CD3 partners. Present also in fetal NK-cells

CD3d 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 Cytomety
- Cell Culture

CD3d Antibody - Images



All lanes : Anti-CD3d Antibody at 1:500 dilution Lane 1: Jurkat whole cell lysate Lane 2: MOLT-4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CD3d Antibody - Background

The CD3 complex mediates signal transduction.

CD3d Antibody - References

van den Elsen P.,et al.Proc. Natl. Acad. Sci. U.S.A. 83:2944-2948(1986).
van den Elsen P.,et al.Nature 312:413-418(1984).
Tunnacliffe A.,et al.EMBO J. 5:1245-1252(1986).
Jin P.,et al.Genomics 83:566-571(2004).
Taylor T.D.,et al.Nature 440:497-500(2006).