

Rabbit CD3D Polyclonal Antibody | anti-CD3D antibody

CD3D Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326144	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

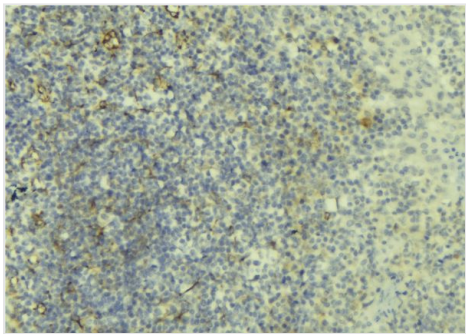
PRODUCT SYNONYMS

CD3D; Polyclonal Antibody; CD3D Antibody; CD3 antigen delta subunit; CD3 delta; CD3d; CD3d antigen delta polypeptide (TiT3 complex); CD3d molecule delta (CD3-TCR complex); CD3D_HUMAN; IMD19; OKT3 delta chain; T cell receptor T3 delta chain; T-cell receptor T3 delta chain; T-cell surface glycoprotein CD3 delta chain; T3D; anti-CD3D antibody

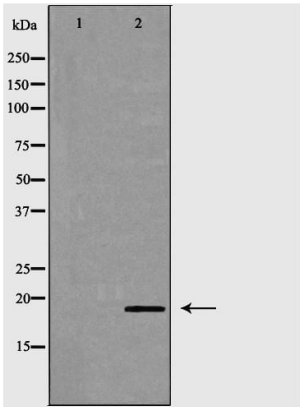
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CD3D antibody detects endogenous levels of total CD3D
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	171
Applicable Applications for anti-CD3D antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CD3D
Subcellular Location	Membrane.
Tissue Specificity	CD3D is mostly present on T-lymphocytes with its TCR-CD3 partners. Present also in fetal NK-cells.
Predicted Cross Reactivity	Bovine, Horse, Sheep
Similarity	Bovine (80%), Horse (80%), Sheep (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326144 at 1/100 staining Human lymph tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Jurkat using CD3D antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CD3D antibody

Description: The protein encoded by this gene is part of the T-cell receptor/CD3 complex (TCR/CD3 complex) and is involved in T-cell development and signal transduction. The encoded membrane protein represents the delta subunit of the CD3 complex, and along with four other CD3 subunits, binds either TCR alpha/beta or TCR gamma/delta to form the TCR/CD3 complex on the surface of T-cells. Defects in this gene are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-positive (SCIDBNK). Two transcript variants encoding different isoforms have been found for this gene. Other variants may also exist, but the full-length natures of their transcripts has yet to be defined. [provided by RefSeq, Feb 2009]

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).

Subunit Structure: The TCR-CD3 complex is composed of a CD3D/CD3E and a CD3G/CD3E heterodimers that preferentially associate with TCRalpha and TCRbeta, respectively, to form TCRalpha/CD3E/CD3G and TCRbeta/CD3G/CD3E trimers. In turn, the hexamer interacts with CD3Z homodimer to form the TCR-CD3 complex. Alternatively, TCRalpha and TCRbeta can be replaced by TCRgamma and TCRdelta. Interacts with coreceptors CD4 and CD8 (PubMed:1396954, PubMed:12215456).

Post-translational Modifications: Phosphorylated on Tyr residues after T-cell receptor triggering by LCK in association with CD4/CD8.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502669
NCBI GeneID	915
NCBI Accession #	NP_000723.1
NCBI GenBank Nucleotide #	NM_000732.4
UniProt Accession #	P04234; A8MVP6
Molecular Weight	Observed: 19 kDa Predicted: 19 kDa
NCBI Official Full Name	T-cell surface glycoprotein CD3 delta chain isoform A

NCBI Official Synonym Full Names	CD3d molecule
NCBI Official Symbol	CD3D
NCBI Official Synonym Symbols	T3D; IMD19; CD3-DELTA
NCBI Protein Information	T-cell surface glycoprotein CD3 delta chain
UniProt Protein Name	T-cell surface glycoprotein CD3 delta chain
UniProt Gene Name	CD3D
UniProt Synonym Gene Names	T3D

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cd3d-antibody-immunohistochemistry-western-blot-elisa/326144>