

## Anti-CD3D Antibody (2U54)

## Product Details

Ig Type:	hIgG1
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	2U54
Purification:	Affinity-chromatography

## Applications

	Western Blot
	-Positive WB detected in: Jurkat whole cell lysate
Verified Activity:	-All lanes: CD3D antibody at 1:1000
	-Secondary: Goat polyclonal to human IgG at 1/50000 dilution
	-Predicted band size: 19 kDa
	-Observed band size: 19 kDa
Application:	ELISA,WB
Recommended	WB:1:500-1:2000.

## Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

## Antigen Details

Immunogen:	Recombinant Protein: Human CD3D Protein
Antigen Species:	Human
Gene ID:	915
Uniprot ID:	P04234
Biology Area:	Immunology, Stem cells

## Research Background

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. 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).

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481