

## CD3 ζ (phospho Tyr142) Polyclonal Antibody

Catalog No: YP0051

**Reactivity:** Human; Mouse; Rat; Monkey

**Applications:** WB;IHC;IF;ELISA

Target: CD3  $\zeta$ 

**Fields:** >>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell

differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>Chagas disease;>>Epstein-Barr virus infection;>>Human

immunodeficiency virus 1 infection;>>PD-L1 expression and PD-1 checkpoint

pathway in cancer

Gene Name: CD247

Protein Name: T-cell surface glycoprotein CD3 zeta chain

P20963

P24161

Human Gene Id: 919

**Human Swiss Prot** 

No:

Mouse Gene Id: 12503

**Mouse Swiss Prot** 

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

CD3 zeta around the phosphorylation site of Tyr142. AA range:111-160

Specificity: Phospho-CD3 ζ (Y142) Polyclonal Antibody detects endogenous levels of CD3 ζ

protein only when phosphorylated at Y142.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

1/3



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 20kD

**Cell Pathway :** Natural killer cell mediated cytotoxicity; T\_Cell\_Receptor;

**Background:** The protein encoded by this gene is T-cell receptor zeta, which together with T-

cell receptor alpha/beta and gamma/delta heterodimers, and with CD3-gamma, -delta and -epsilon, forms the T-cell receptor-CD3 complex. The zeta chain plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. Low expression of the antigen results in impaired immune response. Two alternatively spliced transcript variants encoding distinct isoforms

have been found for this gene. [provided by RefSeq, Jul 2008],

**Function:** disease:Defects in CD247 are a cause of primary T-cell immunodeficiency

[MIM:610163]. Affected individuals suffer of recurrent infections. Patients T-cell counts are very low and B-cell counts are normal.,domain:The ITAM domains mediate interaction with SHB.,function:Probable role in assembly and expression of the TCR complex as well as signal transduction upon antigen triggering.,online information:CD247 mutation db,PTM:Phosphorylated on Tyr residues after T-cell

receptor triggering., similarity: Belongs to the CD3Z/FCER1G

family., similarity: Contains 3 ITAM domains., subunit: The TCR/CD3 complex of T-

lymphocytes consists of either a TCR alpha/beta or TCR gamma/delta

heterodimer coexpressed at the cell surface with the invariant subunits of CD3 labeled gamma, delta, epsilon, zeta, and eta. CD3-zeta forms either homodimers

or heterodimers with CD3-eta. Interacts with SLA and SLA2. Interacts w

Subcellular Location:

Cell membrane; Single-pass type I membrane protein.

**Expression:** CD3Z is expressed in normal lymphoid tissue and in peripheral blood

mononuclear cells (PBMCs) (PubMed:11722641).

Tag: orthogonal

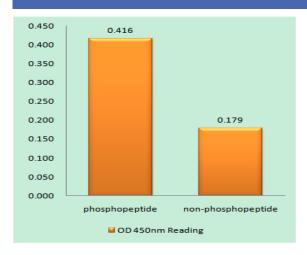
**Sort** : 51

No4:

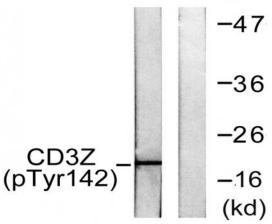
Host: Rabbit

Modifications: Phospho

## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CD3 zeta (Phospho-Tyr142) Antibody



Western blot analysis of lysates from Jurkat cells treated with UV 15', using CD3 zeta (Phospho-Tyr142) Antibody. The lane on the right is blocked with the phospho peptide.