

# Rabbit anti CD3 zeta Polyclonal Antibody

Alternative Name(s): CD247; CD3-zeta;

#### **Order Information**

Description: CD3 zeta
Catalogue: 500-3054
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

• Application: IHC(P), WB • Reactivity: Hu, Ms, Rt

### **ANTIGEN PREPARATION**

A synthetic peptide corresponding to the N-terminus of human CD3 zeta. This sequence is identical among human, rat and mouse species.

#### **BACKGROUND**

CD3 is a glycoprotein consisting of up to five polypeptide chains (gp20, gp26, p16, p20, p28). It forms three dimmers: a heterodimer of gamma and epsilon chain, a heterodimer of delta and epsilon chains and a homodimer of two zeta chains or a heterodimer of zeta and eta chains. CD3 is required for proper assembly, trafficking and surface expression of TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells. CD3 is involved in T cell activation, proliferation and apoptosis pathway. This protein is present on virtually all peripheral blood T cells and thymocytes. The CD3 zeta plays an important role in coupling antigen recognition to several intracellular signal transduction pathway. Low expression of the antigen results in impaired immune response.

## **PURIFICATION**

The Rabbit IgG is purified by Epitope Affinity Purification

#### **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

### **SPECIFICITY**

This antibody recognizes human CD3 zeta protein. It cross-reacts to human, mouse and rat. The other species was not tested.

# **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

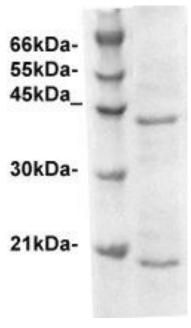
### **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 μg/ml
- Immunoprecipitation: 2-5 μg/ml
- IHC: 2-10 µg/ml
- · Flow cytometry: Not tested
- Molecular Weight: 20.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

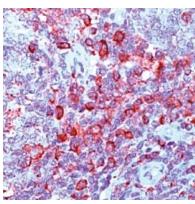
<sup>\*</sup>Optimal dilutions should be determined by researchers for the specific applications.







Western Blot: Jurkat cell lysate was resolved onto 12% SDS-PAGE, and and followed by immunoblotting with Rabbit anti-CD3 zeta (Cat# 500-3054) antibody at 1:500. Two immunoreactive proteins were observed at ~20 kDa (monomer) and ~42 kDa (Dimmer).



Immunohistochemistry: Human tonsil tissue (FFPE) stained with Anti-CD3 zeta (Cat# 500-3054) antibody at 1:100 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

**REFERENCES**