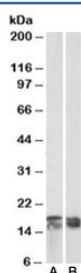


## CD3 zeta Antibody / CD247 (R34549)

| Catalog No.  | Formulation   | Size   |
|--------------|---|--------|
| R34549-100UG | 0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide | 100 ug |

[Bulk quote request](#)

|                    |  |
|--------------------|--|
| Availability       | 1-3 business days  |
| Species Reactivity | Human  |
| Format             | Antigen affinity purified                                      |
| Host               | Goat   |
| Clonality          | Polyclonal (goat origin)                                       |
| Isotype            | Goat Ig  |
| Purity             | Antigen affinity   |
| Gene ID            | 919  |
| Applications       | Western Blot : 0.03-0.1ug/ml<br>ELISA (peptide) LOD : 1:128000 |
| Limitations        | This CD3 zeta antibody is available for research use only.     |



Western blot testing of human tonsil [A] and Jurkat [B] lysates with CD3 zeta antibody at 0.03ug/ml. Predicted molecular weight ~19 kDa but may be observed at higher molecular weights due to glycosylation.

## Description

CD3 zeta (CD247) is a signaling molecule within the T cell receptor (TCR) complex, functioning as a key amplifier of antigen-driven activation. Its cytoplasmic domain contains multiple immunoreceptor tyrosine-based activation motifs (ITAMs) that recruit and activate downstream kinases, facilitating the transmission of activation signals to the nucleus.

Beyond its role in initiating T cell responses, CD3 zeta influences TCR surface expression, immune synapse stability, and

the development of effector and memory T cell populations. Dysregulation of CD3 zeta has been implicated in immune exhaustion, certain leukemias, and autoimmune disorders, making it an important focus for translational and basic immunology research.

Using a high-quality CD3 zeta antibody enables sensitive and specific detection in applications such as western blot, flow cytometry, and immunohistochemistry. A CD3 zeta antibody from NSJ Bioreagents provides reliable performance for examining TCR signal strength, tracking T cell activation states, and exploring disease-associated immune alterations. Selecting the appropriate CD3 zeta antibody is essential for generating robust and reproducible data.

## **Application Notes**

Optimal dilution of the CD3 zeta antibody should be determined by the researcher.

## **Immunogen**

Amino acids KNPQEGLYNELQKD were used as the immunogen for this CD3 zeta antibody.

## **Storage**

Aliquot and store the CD3 zeta antibody at -20oC.