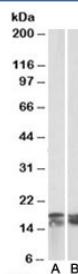


CD3 zeta Antibody / CD247 (R34549)

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 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)–CD3 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.