

11-712-C100

## Monoclonal Antibody to CD3 zeta (Phospho-Tyr72) Purified Antibody (0.1 mg)

Clone: EM-26

**Isotype:** Mouse IgG2b

**Specificity:** The mouse monoclonal antibody EM-26 recognizes phosphorylated tyrosine 72 of

CD3 zeta chain (CD247), which is a component of TCR/CD3 complex expressed

on T cells.

Regulatory Status: RUO

**Immunogen:** A phospho specific peptide corresponding to the amino acids surrounding tyrosine

72 of mouse CD3 zeta linked to KLH

**Species Reactivity:** Human, Mouse

**Application:** Flow Cytometry

Recommended dilution: 2 - 10 µg/ml

Positive control: Jurkat cells treated with pervanadate; T-cells from lymph nodes of

OT-1 mouse treated with pervanadate

Western Blotting

Recommended dilution: 2 - 5 µg/ml

Positive control: Jurkat cells lysate treated with pervanadate; Splenocyte lysate of

Balb/c or F1 mouse treated with pervanadate

Application note: Non-reducing conditions recommended

Immunocytochemistry

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label

Background: CD3 complex is crucial in transducing antigen-recognition signals into the

cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta (CD247). These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules. This association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and

proliferation.

For laboratory research only, not for drug, diagnostic or other use.



## PRODUCT DATA SHEET

## References:

\*Dopfer EP, Schöpf B, Louis-Dit-Sully C, Dengler E, Höhne K, Klescová A, Prouza M, Suchanek M, Reth M, Schamel WW: Analysis of novel phospho-ITAM specific antibodies in a S2 reconstitution system for TCR-CD3 signalling. Immunol Lett. 2010 May 4;130(1-2):43-50

\*Borroto A, Arellano I, Dopfer EP, Prouza M, Suchànek M, Fuentes M, Orfao A, Schamel WW, Alarcón B: Nck recruitment to the TCR required for ZAP70 activation during thymic development. J Immunol. 2013 Feb 1;190(3):1103-12.

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