

### 30-1513: Anti-CD3 zeta (Phospho-Tyr72) Monoclonal Antibody (Clone:EM-26)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	EM-26
<b>Application :</b>	FACS, WB, ICC
<b>Reactivity :</b>	Human, Mouse
<b>Gene :</b>	CD247
<b>Gene ID :</b>	919
<b>Uniprot ID :</b>	P20963
<b>Format :</b>	Purified
<b>Alternative Name :</b>	CD247,CD3Z,T3Z,TCRZ
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	A phospho specific peptide corresponding to the amino acids surrounding tyrosine 72 of mouse CD3 zeta linked to KLH

#### Description

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.

#### Product Info

<b>Amount :</b>	0.1 mg
<b>Purification :</b>	Purified by protein-A affinity chromatography
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

#### Application Note

**Western Blotting** *Recommended dilution:* 2 - 5  $\mu$ g/ml

*Positive control:* Jurkat cells lysate treated with pervanadate; Splenocyte lysate of Balb/c or F1 mouse treated with pervanadate

#### <Immunofluorescence

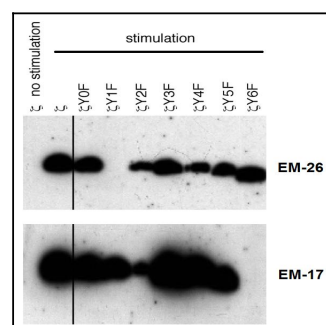


Figure 1: Reactivity of the monoclonal antibodies EM-26 (anti-CD3 zeta phospho-Tyr72) and EM-17 (anti-CD3 zeta phospho-Tyr153) with phosphorylated particular human CD3 zeta mutants. The Y1F and Y6F mutants lack phosphotyrosine 72 and 153, respectively.

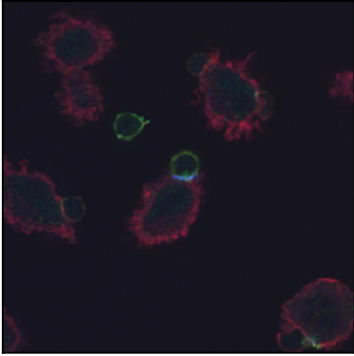


Figure 2: Detection of phosphorylated CD3 zeta (EM-26; light blue) in immunological synapse formed between the lymph node native T cells from AND TCR transgenic mice and DCEK cells loaded with MCC peptide, after 20 min. Total CD3 zeta indicated in green, actin cytoskeleton in red.