## 30-1532: Anti-CD3 zeta (Phospho-Tyr111) Monoclonal Antibody (Clone:EM-55)

| Clonality : | Monoclonal |
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| Clone Name : | EM-55 |
| Application : | FACS, WB |
| Reactivity : | Human, Mouse |
| Gene : | CD247 |
| Gene ID : | 919 |
| Uniprot ID : | P20963 |
| Format : | Purified |
| Alternative Name : | CD247,CD3Z,T3Z,TCRZ |
| Isotype : | Mouse IgG1 |
| Immunogen Information $:$ BP1 (pTyr111/123) - 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

| Amount : | 0.1 mg |
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| Purification : | Purified by protein-A affinity chromatography |
| Storage condition: | Store at $2-8^{\circ} \mathrm{C}$. Do not freeze. |



Figure 1: Cell lyzates of HEK293T/17 cells transiently transfected with expression vectors harboring genes for mCD3zeta wild type and six different mCD3zeta mutants, where particular ITAM tyrosines were substituted with phenylalanines, were prepared. Subsequently the lysates (non-reducing conditions) were immunoblotted with mouse mAb anti-pY111 mCD3zeta (clone EM-55). 1: Wt mCD3zeta pervanadate nonstimulated 2: Wt mCD3zeta pervanadate stimulated 3: mut. mCD3zeta Y/F2-6 4: mut. mCD3zeta Y/F1 and 3-6 5: mut. mCD3zeta Y/F1-2 and 4-6 (thus only pY111 remains native) 6: mut. mCD3zeta Y/F1-3 and 5-6 7: mut. mCD3zeta Y/F1-4 and 6 8: mut. mCD3zeta Y/F1-5

