

Product datasheet for **AM26782PU-N**

CD247 pTyr142 Mouse Monoclonal Antibody [Clone ID: EM-54]

Product data:

Product Type:	Primary Antibodies
Clone Name:	EM-54
Applications:	FC, WB
Recommended Dilution:	Flow cytometry: Intracellular staining. Western blot.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	CP1 (pTyr142) - KLH
Specificity:	This antibody recognizes phosphorylated tyrosine 142 of CD3 zeta chain (CD247), which is a component of TCR/CD3 complex expressed on T cells.
Formulation:	Phosphate buffered saline (PBS) State: Purified State: Liquid Ig fraction Preservative: 15 mM sodium azide, approx. pH 7.4
Concentration:	lot specific
Purification:	Protein-A affinity chromatography (> 95% pure by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	CD247 molecule
Database Link:	Entrez Gene 919 Human P20963



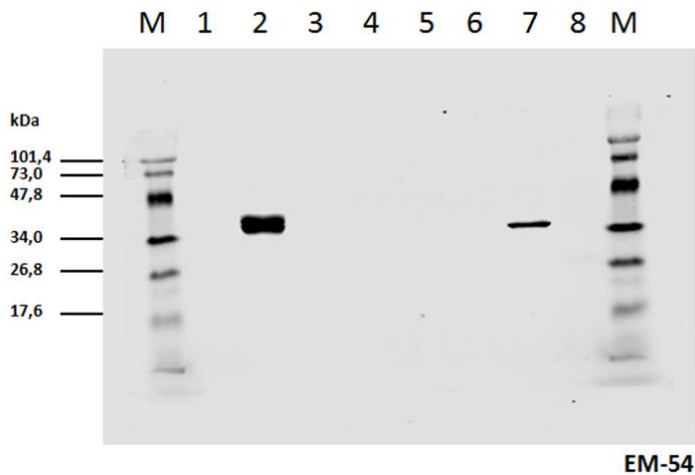
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Background:

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.

Synonyms:

T3Z, TCRZ, CD3 zeta chain

Product images:


Cell lysates 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-pY142 mCD3zeta (clone EM-54). 1: Wt mCD3zeta pervanadate non-stimulated 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 6: mut. mCD3zeta Y/F1-3 and 5-6 7: mut. mCD3zeta Y/F1-4 and 6 (thus only pY142 remains native) 8: mut. mCD3zeta Y/F1-5