

# ARG65722 anti-CD3 zeta phospho (Tyr142) antibody [EM-54]

Package: 100 μg Store at: -20°C

Summary	
Product Description	Mouse Monoclonal antibody [EM-54] recognizes CD3 zeta phospho (Tyr142)
Tested Reactivity	Hu, Ms
Tested Application	FACS, WB
Specificity	This antibody recognizes phosphorylated tyrosine 142 of CD3 zeta chain (CD247), which is a component of TCR/CD3 complex expressed on T cells.
Host	Mouse
Clonality	Monoclonal
Clone	EM-54
Isotype	lgG1
Target Name	CD3 zeta
Species	Human
Immunogen	Phosphospecific peptide around Tyr142 of Human CD3 zeta.
Conjugation	Un-conjugated
Alternate Names	IMD25; CD3Z; CD3-ZETA; T-cell surface glycoprotein CD3 zeta chain; CD3Q; T-cell receptor T3 zeta chain; CD3H; TCRZ; T3Z; CD antigen CD247

## **Application Instructions**

Application table	Application	Dilution
	FACS	1 - 4 μg/ml
	WB	Assay-dependent
Application Note	* The dilutions indicate recomm should be determined by the sci	ended starting dilutions and the optimal dilutions or concentrations entist.

## Properties

Form	Liquid
Purification	Purification with Protein A.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

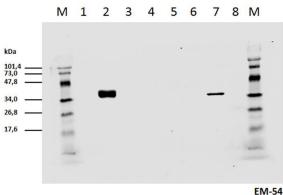
before use.

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

### **Bioinformation**

Database links	GenelD: 12503 Mouse
	GenelD: 919 Human
	Swiss-port # P20963 Human
	Swiss-port # P24161 Mouse
Gene Symbol	CD247
Gene Full Name	CD247 molecule
Background	The protein encoded by this gene is T-cell receptor zeta, which together with T-cell receptor alpha/beta and gamma/delta heterodimers, and with CD3-gamma, -delta and -epsilon, forms the T-cell receptor- CD3 complex. The zeta chain plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. Low expression of the antigen results in impaired immune response. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Function	Probable role in assembly and expression of the TCR complex as well as signal transduction upon antigen triggering. [UniProt]
Highlight	Related products: <u>CD3 antibodies</u> ; <u>CD3 ELISA Kits</u> ; <u>CD3 Duos / Panels</u> ; <u>Anti-Mouse IgG secondary antibodies</u> ; Related news: <u>New antibody panels and duos for Tumor immune microenvironment</u> <u>Tumor-Infiltrating Lymphocytes (TILs)</u>
Research Area	Developmental Biology antibody; Immune System antibody
Calculated Mw	19 kDa
PTM	Phosphorylated on Tyr residues after T-cell receptor triggering.

### Images



#### ARG65722 anti-CD3 zeta phospho (Tyr142) antibody [EM-54] WB image

Westren blot: 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 stained with ARG65722 anti-CD3 zeta phospho (Tyr142) antibody [EM-54]. Lanes:

- 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.