

# Product datasheet

info@arigobio.com

ARG62803 anti-CD3 epsilon antibody [MEM-92]

Package: 100 μg Store at: -20°C

### **Summary**

Product Description Mouse Monoclonal antibody [MEM-92] recognizes CD3 epsilon

Tested Reactivity Hu

Tested Application FACS, FuncSt, IP

Specificity The clone MEM-92 reacts with epsilon chain of human CD3 complex, a part of a bigger multisubunit

complex of the T cell receptor (CD3/TCR) expressed on peripheral blood T lymphocytes and mature

thymocytes.

HLDA IV.; WS Code T 97

Host Mouse

**Clonality** Monoclonal

Clone MEM-92

Isotype IgM

Target Name CD3 epsilon

Species Human

Immunogen Human peripheral blood lymphocytes.

Conjugation Un-conjugated

Alternate Names CD3E; CD3 Epsilon Subunit Of T-Cell Receptor Complex; T-Cell Surface Glycoprotein CD3 Epsilon Chain;

CD3e Antigen, Epsilon Polypeptide (TiT3 Complex); T-Cell Surface Antigen T3/Leu-4 Epsilon Chain; CD3e

Molecule, Epsilon (CD3-TCR Complex); CD3-Epsilon; CD3epsilon

## **Application Instructions**

Application table	Application	Dilution
	FACS	3 - 10 μg/ml
	FuncSt	Assay-dependent
	IP	Assay-dependent
Application Note	Functional studies: The clone MEM-92 in solution induces early responses of T cell activation (tyrosine phosphorylation, calcium elevation, Erk activation and expression of activation antigens), but it is unable to induce T cell proliferation.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Purified from ascites by thiophilic adsorption-affinity chromatography.

Purity > 95% (by SDS-PAGE)

Buffer TBS (pH 8.0) 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.

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

#### Bioinformation

Database links <u>GenelD: 915 Human</u>

Swiss-port # P04234 Human

Gene Symbol CD3E

Gene Full Name CD3 Epsilon Subunit Of T-Cell Receptor Complex

Background The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma,

-delta and -zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T-cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. Defects in this gene cause immunodeficiency. This gene has also

been linked to a susceptibility to type I diabetes in women.

Function Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in

adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein

tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways.

Highlight Related products:

CD3 antibodies; CD3 ELISA Kits; CD3 Duos / Panels; CD3 recombinant proteins; Anti-Mouse IgM

secondary antibodies;

Related news:

New antibody panels and duos for Tumor immune microenvironment

<u>Tumor-Infiltrating Lymphocytes (TILs)</u> <u>Exploring Antiviral Immune Response</u>

Research Area Cancer antibody; Developmental Biology antibody; Immune System antibody; Lymphocyte Marker

antibody; Inflammatory Cell Marker antibody; T-cell Marker antibody; T-cell infiltration Study antibody;

Tumor-infiltrating Lymphocyte Study antibody

Calculated Mw 19 kDa

Cellular Localization Cell membrane, Membrane