

Product datasheet

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ARG62801 anti-CD3 epsilon antibody [OKT3] (low endotoxin)

Package: 100 μg Store at: -20°C

Summary

Product Description Functional grade and low endotoxin Mouse Monoclonal antibody [OKT3] recognizes CD3 epsilon

Tested Reactivity Hu

Tested Application FACS, FuncSt, IHC-Fr

Specificity The clone OKT3 recognizes the CD3 antigen of the TCR/CD3 complex on mature human T cells. This

antibody, also known as Orthoclone OKT3 or Muromonab-CD3, has been extensively used as a drug for therapy of acute, glucocorticoid resistant rejection of allogenic renal, heart and liver transplants. It has

also been investigated for use in treating T-cell acute lymphoblastic leukemia.

HLDA VI; WS Code T6T-R3

Host Mouse

Clonality Monoclonal

Clone OKT3 Isotype IgG2a

Target Name CD3 epsilon

Immunogen Commercially sensitive information

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	1 μg/ml
	FuncSt	Assay-dependent
	IHC-Fr	Assay-dependent
Application Note	Functional studies: Counteracting both generation and function of effector T cells. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

 Form
 Liquid

 Purification
 Purification with Protein A.

 Purification Note
 0.2 μm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)

 Buffer
 PBS (pH 7.4)

Concentration PBS (pH 7.4 PBS (pH 7.4

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>GeneID: 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 IgG

secondary antibodies;

Related news:

New antibody panels and duos for Tumor immune microenvironment

Tumor-Infiltrating Lymphocytes (TILs)
Exploring Antiviral Immune Response

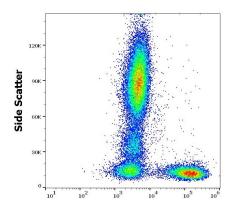
Research Area Cancer antibody; Developmental Biology antibody; Immune System antibody; Lymphocyte Marker

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

Tumor-infiltrating Lymphocyte Study antibody

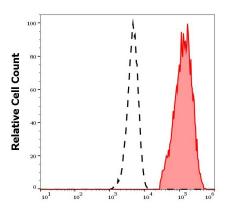
Calculated Mw 19 kDa

Cellular Localization Cell membrane, Membrane



ARG62801 anti-CD3 epsilon antibody [OKT3] (low endotoxin) FACS image $\,$

Flow Cytometry: Human peripheral whole blood stained with ARG62801 anti-CD3 epsilon antibody [OKT3] (low endotoxin) at 1 $\mu\text{g/ml}$ dilution, followed by APC-conjugated Goat anti-Mouse antibody.



ARG62801 anti-CD3 epsilon antibody [OKT3] (low endotoxin) FACS image

Flow Cytometry: Separation of human CD3 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG62801 anti-CD3 epsilon antibody [OKT3] (low endotoxin) at 1 $\mu g/ml$ dilution, followed by APC-conjugated Goat anti-Mouse antibody.