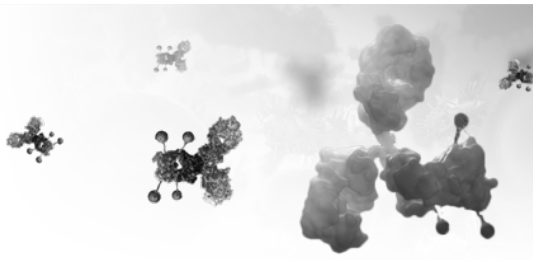

Rat Anti-Mouse CD3ε Monoclonal antibody, clone KT3 (CABT-L4505)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The KT3 monoclonal antibody reacts with mouse CD3ε, a 20 kDa transmembrane cell-surface protein that belongs to the immunoglobulin superfamily. CD3ε is one of five polypeptide chains that combine to form the TCR complex. CD3ε is expressed on T lymphocytes, NK-T cells, and to varying degrees on developing thymocytes. CD3 plays roles in TCR signaling, T lymphocyte activation, and antigen recognition. The KT3 antibody has been shown to induce T lymphocyte activation via binding and stimulating the TCR.
Target	Mouse CD3ε
Immunogen	CBAT6 mouse thymocytes
Isotype	IgG2a
Source/Host	Rat
Species Reactivity	Mouse
Clone	KT3
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro T cell negative selection, in vitro T cell stimulation/activation, IF
Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific

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Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	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.
Keywords	CD3, CD3 epsilon

GENE INFORMATION

Official Symbol	CD3e molecule, epsilon (CD3-TCR complex)
Synonyms	CD3, CD3 epsilon
References	Reuter, A., et al. (2015). "Criteria for dendritic cell receptor selection for efficient antibody-targeted vaccination." J Immunol 194(6): 2696-2705. PubMed;

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