



Anti-CD3E monoclonal antibody, clone CD3-12 [FITC] (CABT-48630RH)

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

PRODUCT INFORMATION

Product Overview

Rat anti Human CD3, clone CD3-12 raised against a peptide representing an invariant cytoplasmic sequence within the CD3 ϵ chain recognizes human CD3 ϵ . CD3 is a multimeric protein complex composed of four distinct polypeptide chains (ϵ , γ , δ , ζ) that assemble and function as three pairs of dimers ($\epsilon\gamma$, $\epsilon\delta$, $\zeta\zeta$). The CD3 complex serves as a T cell co-receptor that associates non-covalently with the T cell receptor (TCR). CD3 is a defining feature of cells belonging to the T cell lineage and can therefore be used as T cell marker. As Rat anti Human CD3, clone CD3-12 has been specifically raised against an epitope within the epsilon peptide chain, highly conserved among species clone CD3-12 has a very broad species crossreactivity for the CD3 marker.

Specificity	CD3E
Immunogen	Synthetic peptide sequence derived from cytoplasmic epitope of CD3 (Glu-Arg-Pro-Pro-Pro-Val- Pro-Asn-Pro-Asp-Tyr-Glu-Pro-Cys) (ERPPPVPNPDYEPC)
Isotype	IgG1
Source/Host	Rat
Species Reactivity	Human, Alpaca, Amazon Parrot, Birds, Bovine, Cat, Chicken, Cynomolgus monkey, Dog, Duck, Harbour Porpoise, Horse, Koala, Mammals, Mouse, Pig, Raccoon, Rhesus monkey, Sea Lion, Spotted Hyena
Clone	CD3-12
Conjugate	FITC
Applications	FC
Format	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Size	100 µg
Preservative	See individual product datasheet
Storage	in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

Gene Name	CD3E CD3e molecule, epsilon (CD3-TCR complex) [Homo sapiens (human)]
Official Symbol	CD3E
Synonyms	CD3E; CD3e molecule, epsilon (CD3-TCR complex); T3E; TCRE; IMD18; T-cell surface glycoprotein CD3 epsilon chain; CD3-epsilon; T-cell surface antigen T3/Leu-4 epsilon chain; CD3e antigen, epsilon polypeptide (TiT3 complex); T-cell antigen receptor complex,
Entrez Gene ID	916
Protein Refseq	NP_000724
UniProt ID	P07766
Chromosome Location	11q23
Pathway	Adaptive Immune System; CXCR4-mediated signaling events; Chagas disease (American trypanosomiasis); Costimulation by the CD28 family; Downstream TCR signaling; Downstream signaling in naive CD8+ T cells; Generation of second messenger molecules; HTLV-I infection;
Function	SH3 domain binding; T cell receptor binding; protein binding; protein heterodimerization activity; protein kinase binding; receptor signaling complex scaffold activity; receptor signaling protein activity; transmembrane signaling receptor activity;
