



Anti-CD247 monoclonal antibody, clone G3 (CABT-48907MH)

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

PRODUCT INFORMATION

Product Overview

The T cell antigen receptor (TCR) consists of a ligand-specific alpha/beta heterodimer non-covalently associated with five invariant chains including the CD3 gamma/delta/eta and zeta subunits, all of which are required for efficient surface expression. T cell activation through the TCR induces cellular differentiation and/or proliferation and the production of lymphokines and cytokines. Both the CD3 and TCR zeta subunits are proposed to be responsible for the intracellular signal transduction events. A novel monoclonal antibody, named G3, has been developed that is specific for the TCR zeta chain subunit (CD247). The antibody is capable of precipitating both non-phosphorylated and tyrosine phosphorylated TCR zeta chain. Flow Cytometry Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

Specificity	CD247
Immunogen	113 Amino acid synthetic peptide corresponding to the cytoplasmic domain of murine zeta TCR subunit.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human, Mouse
Clone	G3
Conjugate	Unconjugated
Applications	ELISA; FC; IP; WB
Format	Purified IgG - liquid
Size	1 mg

Preservative	None
Storage	in frost free freezers is not recommended. 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	CD247 CD247 molecule [Homo sapiens (human)]
Official Symbol	CD247
Synonyms	CD247; CD247 molecule; T3Z; CD3H; CD3Q; CD3Z; TCRZ; IMD25; CD3-ZETA; T-cell surface glycoprotein CD3 zeta chain; CD3zeta chain; TCR zeta chain; CD247 antigen, zeta subunit; T-cell receptor T3 zeta chain; CD3Z antigen, zeta polypeptide (TiT3 complex); T-ce
Entrez Gene ID	919
Protein Refseq	NP_000725
UniProt ID	P20963
Chromosome Location	1q24.2
Pathway	Adaptive Immune System; CXCR4-mediated signaling events; Chagas disease (American trypanosomiasis); Costimulation by the CD28 family; Disease; Downstream TCR signaling; Downstream signaling in naive CD8+ T cells; FCGR activation;
Function	identical protein binding; protein binding; protein homodimerization activity; transmembrane signaling receptor activity;