



Anti-CD247 monoclonal antibody, clone G3 [R-PE] (CABT-48914MH)

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 and may be used to detect TCR zeta expressing cells using flow cytometry on permeabilised cells. 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	PE
Applications	FC
Format	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised

Size	100 tests
Preservative	0.09% Sodium Azide
Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. 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;