



Anti-CTLA4 monoclonal antibody, clone BNI3 [R-PE] (CABT-47107MH)

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

PRODUCT INFORMATION

Product Overview

Mouse anti Human CD152 antibody, clone BNI3 recognizes human CD152, also known as CTLA-4 (cytotoxic T-lymphocyte-associated antigen 4), an inhibitory receptor and negative regulator of T-cell responses. CD152 is a single pass type 1 transmembrane protein belonging to the immunoglobulin superfamily containing a single Ig-v-like domain in the extracellular region. CD152 along with CD28 binds to the co-stimulatory molecules CD80 and CD86. Mouse anti human CD152 antibody, clone BNI3 is able to block ligand binding on the Raji B-cell line and blocks binding of an alternative clone, BNI8 to CTLA-4/Ig in ELISA. Further studies indicate that clone BNI3 binds to the same epitope as classified anti CTLA-4 clones 11D4 and 10A8. The cytoplasmic domain of CD152 contains a critical tyrosine at residue 201 phosphorylated by Janus Kinase 2 which subsequently controls surface expression through regulation of CD152 interaction with AP-2. CD152 is expressed primarily as an intracellular antigen with transport to the cell surface under tight regulation of several molecules including Trim, PLD and TIRC7, CD152 also demonstrates rapid internalization once expressed at the cell surface. CD152 plays a significant role in maintaining tolerance to self antigens and defects in CD152 presentation and expression has been implicated in a number of autoimmune diseases. Flow Cytometry Use 20ul of the suggested working dilution to label 5x10⁵ cells in 100ul.

Specificity	CTLA4
Immunogen	Human CTLA-4/human IgG heavy chain fusion protein.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	BNI3
Conjugate	PE

Applications	FC
Format	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid
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	CTLA4 cytotoxic T-lymphocyte-associated protein 4 [Homo sapiens (human)]
Official Symbol	CTLA4
Synonyms	CTLA4; cytotoxic T-lymphocyte-associated protein 4; CD; GSE; GRD4; ALPS5; CD152; CTLA-4; IDDM12; CELIAC3; cytotoxic T-lymphocyte protein 4; CD152 isoform; celiac disease 3; insulin-dependent diabetes mellitus 12; cytotoxic T-lymphocyte-associated serine e
Entrez Gene ID	1493
Protein Refseq	NP_001032720
UniProt ID	P16410
Chromosome Location	2q33
Pathway	Adaptive Immune System; Autoimmune thyroid disease; CTLA4 inhibitory signaling; Calcineurin-regulated NFAT-dependent transcription in lymphocytes; Cell adhesion molecules (CAMs); Costimulation by the CD28 family; Immune System; Rheumatoid arthritis;
Function	protein binding;