

ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [BNI3] recognizes CD152 / CTLA4
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The mouse monoclonal antibody BNI3 recognizes human CD152 / CTLA4, an approximately 45 kDa type I transmembrane protein serving as a negative regulator of T cell responses.
Host	Mouse
Clonality	Monoclonal
Clone	BNI3
Isotype	IgG2a
Target Name	CD152 / CTLA4
Species	Human
Immunogen	Human CD152-IgG heavy chain fusion protein
Conjugation	PE
Alternate Names	GRD4; CTLA-4; CELIAC3; CD; Cytotoxic T-lymphocyte-associated antigen 4; CD152; GSE; CD antigen CD152; Cytotoxic T-lymphocyte protein 4; ALP55; IDDM12

Application Instructions

Application table	Application	Dilution
	FACS	10 µl / 10 ⁶ cells
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

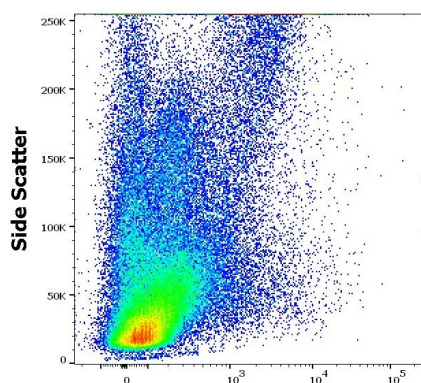
Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

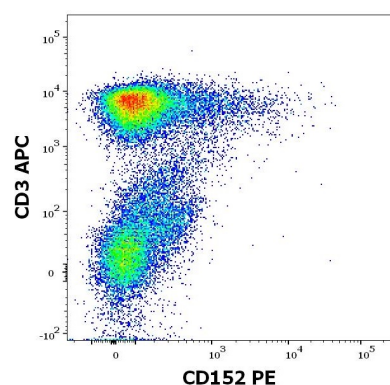
Database links	GeneID: 1493 Human Swiss-port # P16410 Human
Gene Symbol	CTLA4
Gene Full Name	cytotoxic T-lymphocyte-associated protein 4
Background	CD152 / CTLA-4 is a homodimeric transmembrane protein similar to CD28 and binding the same ligands, i.e. CD80 (B7.1) and CD86 (B7.2), but with higher affinity. Unlike CD28 with important costimulating functions, CD152 acts as an important inhibitory receptor essential for modulation of the immune system. CD152 / CTLA-4 becomes transiently expressed on activated T cells and its malfunction can cause autoimmune diseases, such as insulin-dependent diabetes mellitus, Graves disease, Hashimoto thyroiditis, celiac disease, systemic lupus erythematosus, or thyroid-associated orbitopathy.
Function	Inhibitory receptor acting as a major negative regulator of T-cell responses. The affinity of CTLA4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28. [UniProt]
Research Area	Developmental Biology antibody; Immune System antibody
Calculated Mw	25 kDa
PTM	N-glycosylation is important for dimerization. Phosphorylation at Tyr-201 prevents binding to the AP-2 adapter complex, blocks endocytosis, and leads to retention of CTLA4 on the cell surface.

Images



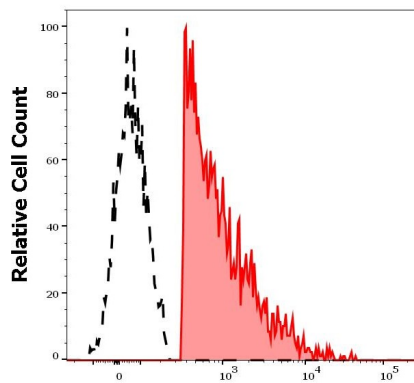
ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE) FACS image

Flow Cytometry: PHA stimulated human peripheral whole blood stained with ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE) (10 µl reagent / 100 µl of peripheral whole blood).



ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE) FACS image

Flow Cytometry: PHA stimulated human lymphocytes stained with ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE) (10 µl reagent / 100 µl of peripheral whole blood) and [ARG54302](#) anti-CD3 antibody [UCHT1] (APC) (10 µl reagent / 100 µl of peripheral whole blood).



ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE) FACS image

Flow Cytometry: Separation of human CD152 positive CD3 positive lymphocytes (red-filled) from CD152 negative CD3 negative lymphocytes (black-dashed). Human PHA stimulated peripheral whole blood stained with ARG54228 anti-CD152 / CTLA4 antibody [BNI3] (PE) (10 µl reagent / 100 µl of peripheral whole blood).