

### Product datasheet

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# ARG65420 anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin)

Package: 100 μg Store at: -20°C

#### **Summary**

Product Description Azide free and low endotoxin Mouse Monoclonal antibody [BNI3] recognizes CD152 / CTLA4

Tested Reactivity Hu

Tested Application FACS, ICC/IF, IHC-Fr, IP

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 Un-conjugated

Alternate Names GRD4; CTLA-4; CELIAC3; CD; Cytotoxic T-lymphocyte-associated antigen 4; CD152; GSE; CD antigen

CD152; Cytotoxic T-lymphocyte protein 4; ALPS5; IDDM12

#### **Application Instructions**

Application table	Application	Dilution
	FACS	1 - 4 μg/ml
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
Application Note	FACS: Intracellular staining.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form	Liquid	
Purification	Purification with Protein A.	
Purification Note	0.2 μm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)	
Buffer	PBS (pH 7.4)	
Concentration	1 mg/ml	

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links <u>GeneID: 1493 Human</u>

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

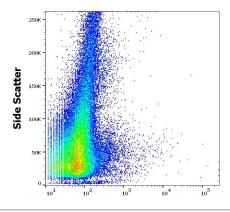
Calculated Mw 25 kDa

PTM N-glycosylation is important for dimerization.

Phosphorylation at Tyr-201 prevents binding to the AP-2 adapter complex, blocks endocytosis, and

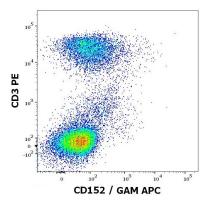
leads to retention of CTLA4 on the cell surface.

#### **Images**



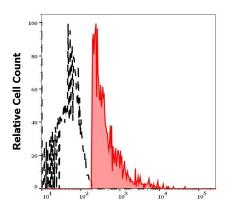
### ARG65420 anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin) FACS image

Flow Cytometry: PHA stimulated human peripheral whole blood stained with ARG65420 anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin) at 10  $\mu$ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.



## ARG65420 anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin) FACS image

Flow Cytometry: Human PHA stimulated lymphocytes stained with ARG65420 anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin) at 10  $\mu$ g/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody. Cells were co-stained with <u>ARG53820</u> anti-CD3 antibody [UCHT1] (PE) (20  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).



## $\ensuremath{\mathsf{ARG65420}}$ anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin) FACS image

Flow Cytometry: Separation of human CD152 positive CD3 positive lymphocytes (red-filled) from CD152 negative CD3 negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG65420 anti-CD152 / CTLA4 antibody [BNI3] (low endotoxin) at 10  $\mu g/ml$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.