Technical Data Sheet

Purified Mouse Anti-human Invariant NK T Cell

Product Information

 Material Number:
 552824

 Size:
 0.1 mg

 Concentration:
 0.5 mg/ml

 Clone:
 6B11

 Isotype:
 Mouse IgG1, κ

 Reactivity:
 QC Testing: Human

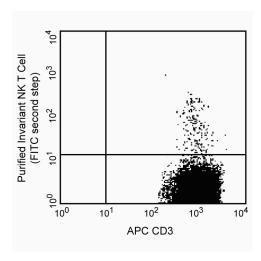
Workshop: NA

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Monoclonal antibody 6B11 reacts with a unique determinant in the CDR3 region of the invariant ($V\alpha24$ -J α Q) TCR chain. Thus 6B11 identifies a subset of all $V\alpha24$ positive T cells. The binding of the PE-conjugate of 6B11 can be partially blocked by other antibodies specific for $V\alpha24$ (BD Biosciences Pharmingen, data not shown). This invariant chain is expressed on invariant NK T cells, which are a small subset of T lymphocytes that also express other NK cell molecules such as CD161. Invariant NK T cells have been reported to play an immunoregulatory role. The $V\alpha24$ -J α Q interacts with the CD1d protein. Invariant NK T cells can be specifically activated by CD1d-presented antigen resulting in rapid production of IL-4 and IFN (also known as IFN- γ). Studies of NK T cells describe their role in anti-tumor immunity and autoimmunity.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of anti-invariant NK T Cell (clone 6B11) reactivity on peripheral blood CD3+ lymphocytes analyzed by flow cytometry. Second step staining with Cat. No. 555988.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

Application Notes

Application

Flow cytometry Routinely Tested

BD Biosciences

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Suggested Companion Products

Catalog Number	Name	Size	Clone	
555746	Purified Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21	
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal	

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before
 discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Exley MA, Tahir SM, Cheng O, et al. A major fraction of human bone marrow lymphocytes are Th2-like CD1d-reactive T cells that can suppress mixed lymphocyte responses. *J Immunol.* 2001; 167(10):5531-5534.(Biology)

Illes Z, Kondo T, Newcombe J, Oka N, Tabira T, Yamamura T. Differential expression of NK T cell V alpha 24J alpha Q invariant TCR chain in the lesions of multiple sclerosis and chronic inflammatory demyelinating polyneuropathy. *J Immunol.* 2000; 164(8):4375-4381.(Biology)

Tahir SM, Cheng O, Shaulov A, et al. Loss of IFN-gamma production by invariant NK T cells in advanced cancer. J Immunol. 2001; 167(7):4046-4050.(Biology)

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