

Technical Data Sheet

FITC Mouse Anti-Human NKB1

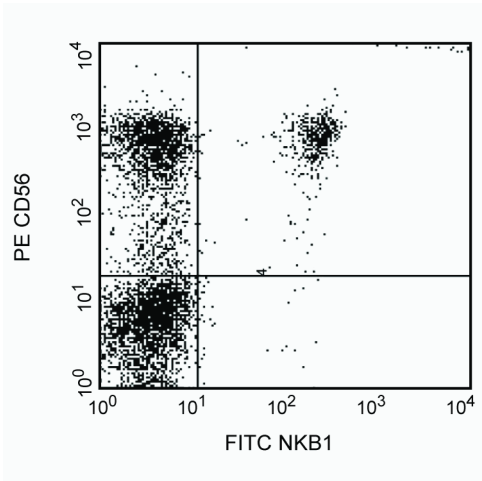
Product Information

Material Number:	555966
Alternate Name:	KIR
Size:	100 tests
Vol. per Test:	20 µl
Clone:	DX9
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with the killer cell inhibitory receptor (KIR), NKB1, a 70 kDa glycoprotein, member of the Ig superfamily, expressed on a subset of natural killer cells and a small subset of T cells. Expression of NKB1 has been observed to vary among individuals. KIR molecules specifically recognize a certain group of HLA class I antigens. Interaction of NKB1 with specific HLA-B antigen on a target cell inhibits cell mediated cytotoxicity, possibly by delivering a negative signal preventing lymphocyte activation. It is suggested that this MHC class I-KIR interaction works as a regulatory mechanism of NK and T-cell responses to antigenic challenge.

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 peripheral blood lymphocytes analyzed by flow cytometry

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555748	FITC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

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Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10⁶ cells in a 100- μ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
4. 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.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

- D'Andrea A, Chang C, Franz-Bacon K, McClanahan T, Phillips JH, Lanier LL. Molecular cloning of NKB1. A natural killer cell receptor for HLA-B allotypes. *J Immunol.* 1995; 155(5):2306-2310.(Biology)
- D'Andrea A, Chang C, Phillips JH, Lanier LL. Regulation of T cell lymphokine production by killer cell inhibitory receptor recognition of self HLA class I alleles. *J Exp Med.* 1996; 184(2):789-794.(Biology)
- Fry AM, Lanier LL, Weiss A. Phosphotyrosines in the killer cell inhibitory receptor motif of NKB1 are required for negative signaling and for association with protein tyrosine phosphatase 1C. *J Exp Med.* 1996; 184(1):295-300.(Biology)
- Gumperz JE, Paterson JC, Litwin V, et al. Specificity of two anti-class I HLA monoclonal antibodies that block class I recognition by the NKB1 killer cell inhibitory receptor. *Tissue Antigens.* 1996; 48(4):278-284.(Biology)
- Gumperz JE, Valiante NM, Parham P, Lanier LL, Tyan D. Heterogeneous phenotypes of expression of the NKB1 natural killer cell class I receptor among individuals of different human histocompatibility leukocyte antigens types appear genetically regulated, but not linked to major histocompatibility complex. *J Exp Med.* 1996; 183(4):1817-1827.(Biology)
- Litwin V, Gumperz J, Parham P, Phillips JH, Lanier LL. NKB1: a natural killer cell receptor involved in the recognition of polymorphic HLA-B molecules. *J Exp Med.* 1994; 180(2):537-543.(Biology)
- Sivori S, Vitale M, Bottino C, et al. CD94 functions as a natural killer cell inhibitory receptor for different HLA class I alleles: identification of the inhibitory form of CD94 by the use of novel monoclonal antibodies. *Eur J Immunol.* 1996; 26(10):2487-2492.(Biology)
- Wagtmann N, Rajagopalan S, Winter CC, Peruzzi M, Long EO. Killer cell inhibitory receptors specific for HLA-C and HLA-B identified by direct binding and by functional transfer. *Immunity.* 1995; 3(6):801-809.(Biology)