Technical Data Sheet Purified Mouse Anti-Human NKB1

Product Information	
Material Number:	555964
Alternate Name:	KIR
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	DX9
Isotype:	Mouse IgG1, ĸ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤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 cytotxicity, 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 on a FACScan (BDIS, San Jose, CA)

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

Suggested Companion Products

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Catalog Number	Name	Name			Size	Clone
555746	55746 Purified Mouse IgG1, κ Isotype Control		0.1 mg	MOPC-21		
555988	FITC G	FITC Goat Anti-Mouse IgG/IgM			0.5 mg	Polyclonal
BD Biosciences						
United States Cana 877.232.8995 888.2 For country-specific co	da Europe 59.0187 32.53.720.550 stact information, visit bdbi	Japan 0120.8555.90 psciences.com/hov	Asia Pacific 65.6861.0633 / to_order/	Latin America/Caribbean 55.11.5185.9995	E	ð BD
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555964 Rev. 3

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.
- 3. 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

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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)

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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)