Technical Data Sheet

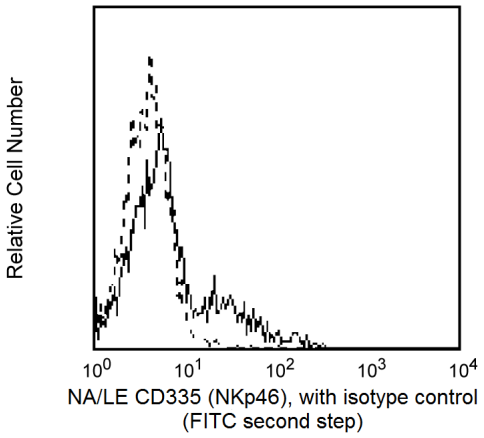
Purified NA/LE Mouse Anti-Human CD335 (NKp46)

Product Information

Material Number:	**557847**
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	9E2/Nkp46
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is ≤0.01 EU/µg (≤0.001 ng/µg) of protein as determined by the LAL assay.

Description

The 9E2/Nkp46 monoclonal antibody specifically binds to CD335. CD335 is also known as the Natural killer cell p46-related protein (NKp46) and the Natural cytotoxicity triggering receptor 1 (NCR1). CD335 is a 46 kDa type I membrane glycoprotein that is expressed on resting and activated NK cells. Its extracellular region contains two C2-type, Ig-like domains. The transmembrane domain contains a positively charged amino acid (Arg) which could be involved in stabilizing the association with CD3ζ. Its intracellular region does not contain immunoreceptor tyrosine-based activating motifs (ITAM), but it is linked to intracytoplasmic transduction machinery by its association with CD3ζ and FcεRIγ adaptor proteins. CD335 along with NKp30 and NKp44 are referred to as natural cytotoxicity receptors (NCR). These receptors play very important roles in cells that kill virus-infected target cells, tumor cells and MHC-class I-unprotected cells.



Profile of CD335 (NKp46) reactivity on peripheral blood lymphocytes analyzed by flow cytometry.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

Flow cytometry	Routinely Tested
Functional assay	Tested During Development

Suggested Companion Products

Catalog Number	Name	Size	Clone
554721	Purified NA/LE Mouse IgG1 κ Isotype Control	0.5 mg	107.3
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Mandelboim O, Porgador A. NKp46. *Int J Biochem Cell Biol.* 2001; 33(12):1147-1150. (Biology)

Nakajima H, Cella M, Bouchon A, et al. Patients with X-linked lymphoproliferative disease have a defect in 2B4 receptor-mediated NK cell cytotoxicity. *Eur J Immunol.* 2000; 30(11):3309-3318. (Biology)

Sivori S, Pende D, Bottino C, et al. NKp46 is the major triggering receptor involved in the natural cytotoxicity of fresh or cultured human NK cells. Correlation between surface density of NKp46 and natural cytotoxicity against autologous, allogeneic or xenogeneic target cells. *Eur J Immunol.* 1999; 29(5):1656-1666. (Biology)

Sivori S, Vitale M, Morelli L, et al. p46, a novel natural killer cell-specific surface molecule that mediates cell activation. *J Exp Med.* 1997; 186(7):1129-1136. (Biology)

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