Technical Data Sheet

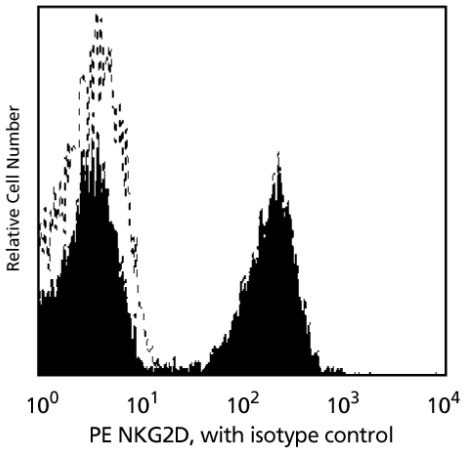
PE Mouse Anti-Human CD314

Product Information

Material Number:	**561815**
Alternate Name:	hu-nkg2d, CD314
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	1D11
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Antibody 1D11 reacts with NKG2D (42 kDa), an activating receptor for MICA encoded within MHC. Different from natural cytotoxicity receptor (NCR), NKG2D expression is not confined to NK cells, it is also present on virtually all TCR γ/δ+ and CD8+TCR α/β+ T cells. NKG2D functions as a triggering receptor involved in natural cytotoxicity mediated by normal NK cells against a variety of tumors or normal target cells. More importantly, NKG2D can complement the role of NCR in tumor cell lysis. Remarkably, the combined maskings of NCR and NKG2D led to a complete inhibition of NK-mediated lysis of all tumor or normal cells.



Profile of NKG2D epxression on peripheral blood lymphocytes analyzed by flow cytometry.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554680	PE Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

1. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
2. 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.
3. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. An isotype control should be used at the same concentration as the antibody of interest.

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References

Bauer S, Groh V, Wu J, et al. Activation of NK cells and T cells by NKG2D, a receptor for stress-inducible MICA. *Science.* 1999; 285(5428):727-729. (Biology)
Groh V, Rhinehart R, Randolph-Habecker J, Topp MS, Riddell SR, Spies T. Costimulation of CD8alphabeta T cells by NKG2D via engagement by MIC induced on virus-infected cells. *Nat Immunol.* 2001; 2(3):255-260. (Biology)