

## Technical Data Sheet

## Purified Mouse Anti-Human NKG2D

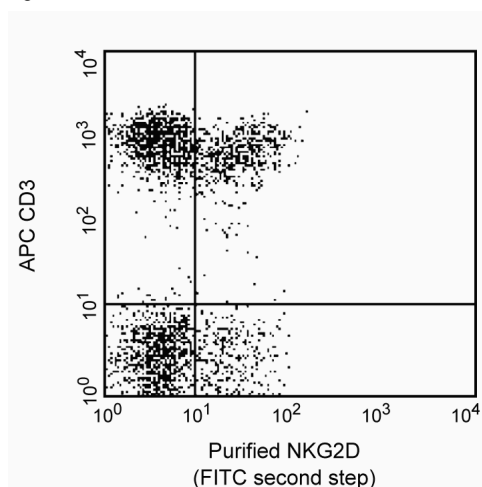
## Product Information

<b>Material Number:</b>	552866
<b>Size:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	1D11
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	NA
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ 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  $\gamma/\delta$ + and CD8+TCR  $\alpha/\beta$ + 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.

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 NKG2D expression on peripheral blood 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
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1, $\kappa$ Isotype Control	0.1 mg	MOPC-21
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. Please refer to [www.bdbiosciences.com/pharmlngen/protocols](http://www.bdbiosciences.com/pharmlngen/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

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)