

# Anti-Human CD314 (NKG2D) (ID11)



Biotin 314B-OIMG 100 µg 1 µg/test 0,01 mg/ml **RUO**

## 1. PRODUCT DESCRIPTION

**Clone:** ID11;  
**Isotype:** IgG1;  
**Tested application:** flow cytometry;  
**Immunogen:** The anti-CD314 monoclonal antibody derives from NK cells;  
**Species reactivity:** Human; Cross reactivity rhesus monkey (Macaca mulatta), cynomolgus monkey (Macaca fascicularis);  
**Storage instruction:** store in the dark at 2-8 °C;  
**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);  
**Recommended usage:** Immunostep's CD314, clone ID11, is a monoclonal antibody intended for the identification and enumeration of human NK cells, CD8+ α/β T cells, and γ/δ T cells using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells;  
**Presentation:** liquid;  
**Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;  
**Purification:** Affinity chromatography;  
**Other names:** KL RK1; KLR; NKG2D; NKG2-D; NK cell receptor D;  
**Gene ID:** 22914;  
**Molecular weight:** 42 kDa.

## 2. ANTIGEN DETAILS

**Large description:** This activating receptor binds strongly to several ligands including MICA and MICB and ULBP-1, -2, and -3 proteins that are expressed by different target cell types. CD314 functions as a triggering receptor involved in natural cytotoxicity mediated by normal NK cells against a variety of tumors or normal target cells. Importantly, CD314 can complement the role of NCR in tumor cell lysis. Remarkably, the combined maskings of NCR and CD314 can reportedly lead to a complete inhibition of NK-mediated lysis of all tumor or normal cells.<sup>(1-5)</sup>

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.






Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

Please, refer to [www.immunostep.com](http://www.immunostep.com) technical support for more information.

## 5. REFERENCES

1. Gilfillan S, Ho EL, Cella M, Yokoyama WM, Colonna M. NKG2D recruits two distinct adaptors to trigger NK cell activation and costimulation. *Nat Immunol*2002 Dec;3(12):1150-5.
2. Van Beneden K, De Creus A, Stevenaert F, Debachter V, Plum J, Leclercq G. Expression of inhibitory receptors Ly49E and CD94/NKG2 on fetal thymic and adult epidermal TCR V gamma 3 lymphocytes. *J Immunol*2002 Apr 01;168(7):3295-302.
3. Raulet DH. Roles of the NKG2D immunoreceptor and its ligands. *Nat Rev Immunol*2003 Oct;3(10):781-90.
4. Gasser S, Orsulic S, Brown EJ, Raulet DH. The DNA damage pathway regulates innate immune system ligands of the NKG2D receptor. *Nature*2005 Aug 25;436(7054):1186-90.
5. Zhou R, Wei H, Sun R, Zhang J, Tian Z. NKG2D recognition mediates Toll-like receptor 3 signaling-induced breakdown of epithelial homeostasis in the small intestines of mice. *Proc Natl Acad Sci U S A*2007 May 01;104(18):7512-5.

## 6. EXPLANATION OF SYMBOLS

	Form
<b>REF</b>	Catalog reference
	Contains sufficient for > test
	Quantity per test
	Regulatory Status
<b>RUO</b>	Research Use Only
<b>[A]</b>	Concentration
	Manufacturer

## 7. MANUFACTURED BY:

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