

CD314 (NKG2D) Monoclonal Antibody (1D11), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	1D11
Conjugate	Biotin
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_466735

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	2 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

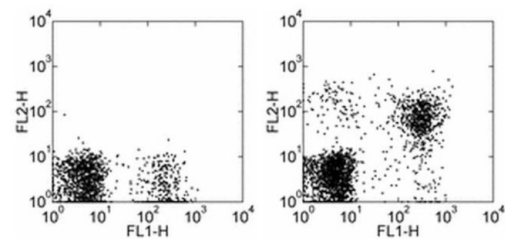
Product Specific Information

Description: The 1D11 monoclonal antibody reacts with the human NKG2D, a 42 kDa lectin-like molecule expressed by NK cells, gamma delta T cells, CD8+ T cells, and some CD4+ T cells. Human NKG2D forms complexes with DAP10, a membrane adaptor protein, and has the ability to costimulate multiple NK activation receptors. The counter-receptor for human NKG2D has been identified as MICA/MICB expressed on epithelial tumors from lung, breast, kidney, ovary, prostate and colon carcinoma. 5C6 and 1D11 block binding of soluble MICA to gamma delta TCR T cell clones and inhibit lysis by these cells. 5C6 and 1D11 induced NKG2D function of redirected lysis of FcReceptor bearing P815 cells.

Applications Reported: The 1D11 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 1D11 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filtration: 0.2 µm post-manufacturing filtered.



CD314 (NKG2D) Antibody (13-5878-82) in Flow
Staining of normal human peripheral blood cells with Anti-Human CD8a FITC (Product # 11-0089-42) and 0.06 µg of Mouse IgG1 kappa Isotype Control Biotin (Product # 13-4714-85) (left) or 0.06 µg of Anti-Human CD314 (NKG2D) Biotin (right) followed by Streptavidin PE (Product # 12-4317-87). CD3+ cells in the lymphocyte gate were used for analysis.

3 References

Flow Cytometry (2)

<p>Bioscience reports</p> <p>miR-20a regulates sensitivity of colorectal cancer cells to NK cells by targeting MICA.</p> <p>"Published figure using CD314 (NKG2D) monoclonal antibody (Product # 13-5878-82) in Flow Cytometry"</p> <p>Authors: Tang S,Fu H,Xu Q,Zhou Y</p>	<p>Year</p> <p>2019</p>
<p>Cancer research</p> <p>A chimeric receptor with NKG2D specificity enhances natural killer cell activation and killing of tumor cells.</p> <p>"13-5878 was used in Flow cytometry/Cell sorting to show the cytotoxic potential of NK cells against tumour subtypes could be markedly enhanced by expression of NKG2D-DAP10-CD3 receptors."</p> <p>Authors: Chang YH,Connolly J,Shimasaki N,Mimura K,Kono K,Campana D</p>	<p>Year</p> <p>2013</p> <p>Species</p> <p>Human</p>

Miscellaneous PubMed (1)

<p>Blood</p> <p>NKG2D receptor regulates human effector T-cell cytokine production.</p> <p>"13-5878 was used in Magnetic cell separation to reveal that human effector T cells alter their function depending on which innate receptors are engaged in conjunction with the TCR complex."</p> <p>Authors: Barber A,Sentman CL</p>	<p>Year</p> <p>2011</p> <p>Species</p> <p>Human</p>
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