

Purified anti-mouse CD335 (NKp46) Antibody

Catalog# / Size	137601 / 50 µg 137602 / 500 µg
Clone	29A1.4
Regulatory Status	RUO
Other Names	NKp46, NCR1
Isotype	Rat IgG2a, κ
Description	CD335, also known as NKp46, is a single-pass type I membrane protein of 46 kD. It belongs to the natural cytotoxicity receptor (NCR) family and contains two Ig-like (immunoglobulin-like) domains. It's expression is restricted to NK cells and a subset of NKT cells; it's not expressed in CD1d-restricted NKT cells. CD335 is a receptor for viral hemagglutinins and heparan sulfate proteoglycans and is involved in NK cell activation.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	NKP46-IgG1 Fc fusion protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested IHC-F - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen tissue sections ^{1,2} and <i>in vitro</i> activation of NK cells ¹ .
Application References	1. Walzer T, <i>et al.</i> 2007. <i>P. Natl. Acad. Sci. USA</i> 104:3384. (FC, Activ) 2. Walzer T, <i>et al.</i> 2007. <i>Nat. Immunol.</i> 8:1337. (FC, Activ) 3. Guerriero JL, <i>et al.</i> 2011. <i>J. Immunol.</i> 186:3517. (IHC) PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	1. Guerriero J, <i>et al.</i> 2011. <i>J Immunol.</i> 186:3517. PubMed 2. Hutton C, <i>et al.</i> 2021. <i>Cancer Cell.</i> 39:1227. PubMed 3. Wang C, <i>et al.</i> 2020. <i>Oncoimmunology.</i> 9:1809947. PubMed 4. Song C, <i>et al.</i> 2019. <i>Nat Commun.</i> 10:3745. PubMed 5. Puca E, <i>et al.</i> 2020. <i>J Gastrointest Oncol.</i> 1.015972222. PubMed 6. Goodall KJ, <i>et al.</i> 2021. <i>J Biol Chem.</i> 297:101141. PubMed 7. Sodir NM, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:6782. PubMed 8. Ma L, <i>et al.</i> 2021. <i>Clinical Cancer Research.</i> 27(6):1778-1791. PubMed 9. Drzyzga A, <i>et al.</i> 2021. <i>Cancers (Basel).</i> 13: . PubMed 10. Xiang H, <i>et al.</i> 2021. <i>MAbs.</i> 13:1981202. PubMed 11. Cribbs AP, <i>et al.</i> 2021. <i>Front Immunol.</i> 12:626255. PubMed 12. Kortlever RM <i>et al.</i> 2017. <i>Cell.</i> 171(6):1301-1315 . PubMed 13. Gubin MM, <i>et al.</i> 2018. <i>Cell.</i> 175:1014. PubMed 14. Staaf E, <i>et al.</i> 2018. <i>Sci Signal.</i> 11:00. PubMed

15. Bajic D, *et al.* 2020. *Mol Cancer Ther.* 19:2554. [PubMed](#)
16. Puca E, *et al.* 2020. *Int J Cancer.* 2518:146. [PubMed](#)
17. Goh W, *et al.* 2020. *Cell Rep.* 33:108285. [PubMed](#)
18. Aguilar OA, *et al.* 2020. *J Immunol.* 205:1709. [PubMed](#)
19. Wagner AK, *et al.* 2017. *Nat Commun.* 8:15627. [PubMed](#)
20. Crinier A, *et al.* 2018. *Immunity.* 49:971. [PubMed](#)
21. Tyagi A, *et al.* 2021. *Nat Commun.* 12:474. [PubMed](#)
22. Cané S, *et al.* 2021. *J Immunother Cancer.* 9:. [PubMed](#)
23. Han H, *et al.* 2020. *Cancer Cell.* 36(5):483-497.e15.. [PubMed](#)
24. Ito Y, *et al.* 2018. *J Exp Med.* 215:2617. [PubMed](#)
25. Martin E, *et al.* 2020. *JCI Insight.* :5. [PubMed](#)

RRID AB_10551441 (BioLegend Cat. No. 137601)
 AB_10552740 (BioLegend Cat. No. 137602)

Antigen Details

Structure	Single-pass type I membrane protein, 46 kD; belongs to the natural cytotoxicity receptor (NCR) family; contains 2 Ig-like (immunoglobulin-like) domains
Distribution	Mature and immature NK cells, subset of NKT cells, but not on CD1d-restricted NKT cells
Function	NK cells activation
Ligand/Receptor	Viral hemagglutinins, heparan sulfate proteoglycans
Cell Type	NK cells, NKT cells
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Colucci F and Cilio CM. 2010. <i>Nat. Immunol.</i> 12:60. 2. Caligiuri MA. 2008. <i>Blood</i> 112:461. 3. Colonna M. 2009. <i>Immunity</i> 31:15.
Gene ID	17086

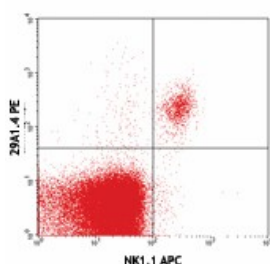
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Brilliant Violet 510™ anti-mouse CD335 (NKp46), Brilliant Violet 711™ anti-mouse CD335 (NKp46), PE anti-mouse CD335 (NKp46), PE/Cyanine7 anti-mouse CD335 (NKp46), Purified anti-mouse CD335 (NKp46), FITC anti-mouse CD335 (NKp46), APC anti-mouse CD335 (NKp46), PerCP/Cyanine5.5 anti-mouse CD335 (NKp46), Brilliant Violet 421™ anti-mouse CD335 (NKp46), Biotin anti-mouse CD335 (NKp46), Brilliant Violet 605™ anti-mouse CD335 (NKp46), Purified anti-mouse CD335 (NKp46) (Maxpar® Ready), Alexa Fluor® 647 anti-mouse CD335 (NKp46), PE/Dazzle™ 594 anti-mouse CD335 (NKp46), APC/Fire™ 750 anti-mouse CD335 (NKp46), Brilliant Violet 650™ anti-mouse CD335 (NKp46), TotalSeq™-A0184 anti-mouse CD335 (NKp46), Brilliant Violet 785™ anti-mouse CD335 (NKp46), Ultra-LEAF™ Purified anti-mouse CD335 (NKp46), TotalSeq™-B0184 anti-mouse CD335 (NKp46), TotalSeq™-C0184 anti-mouse CD335 (NKp46), APC/Cyanine7 anti-mouse CD335 (NKp46), PE/Cyanine5 anti-mouse CD335 (NKp46)

Product Data



C57BL/6 mouse splenocytes stained with purified 29A1.4 conjugated with PE and NK1.1 (PK136) APC

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587