

## APC anti-mouse CD335 (NKp46) Antibody

<b>Catalog# / Size</b>	137607 / 25 µg 137608 / 100 µg
<b>Clone</b>	29A1.4
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	NKp46, NCR1
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	NKP46-IgG1 Fc fusion protein
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen tissue sections <sup>1,2</sup> and <i>in vitro</i> activation of NK cells <sup>1</sup> .

### Application References

(PubMed link indicates BioLegend citation)

- Walzer T, *et al.* 2007. *P. Natl. Acad. Sci. USA* 104:3384. (FC, Activ)
- Walzer T, *et al.* 2007. *Nat. Immunol.* 8:1337. (FC, Activ)
- Guerriero JL, *et al.* 2011. *J. Immunol.* 186:3517. (IHC) [PubMed](#)

### Product Citations

- Glasner A, *et al.* 2017. *Sci Rep.* 10.1038/s41598-017-12998-w. [PubMed](#)
- Hou X, *et al.* 2020. *Cell Reports.* 28(1):172-189.e7.. [PubMed](#)
- Miller CM, *et al.* 2020. *J Virol.* 94:00:00. [PubMed](#)
- Fan L, *et al.* 2021. *Cancers (Basel).* 13:. [PubMed](#)
- Yilmaz B, *et al.* 2021. *Cell Host Microbe.* 29(4):650-663.e9. [PubMed](#)
- Forte E, *et al.* 2020. *J Cell Mol Med.* . [PubMed](#)
- Hu D, *et al.* 2021. *J Cell Mol Med.* 25:2900. [PubMed](#)
- Yan X, *et al.* 2022. *Int J Biol Sci.* 18:585. [PubMed](#)
- Britton GJ *et al.* 2019. *Immunity.* 50(1):212-224 . [PubMed](#)
- Iannello A, *et al.* 2013. *J Exp Med.* 210:2057. [PubMed](#)
- Huang B, *et al.* 2015. *PLoS One.* 10: 0134715. [PubMed](#)

12. Parhi L, *et al.* 2020. *Nat Commun.* 2:721527778. [PubMed](#)
13. Bradley KC, *et al.* 2019. *Cell Rep.* 28:245. [PubMed](#)
14. Stotesbury C, *et al.* 2020. *J Immunol.* 204:1582. [PubMed](#)
15. Sibilio A, *et al.* 2022. *iScience.* 25:103790. [PubMed](#)
16. Hu M, *et al.* 2020. *Cancer Immunol Res.* 8:1150. [PubMed](#)
17. Taylor D, *et al.* 2022. *Front Immunol.* 13:936129. [PubMed](#)
18. Rive CM, *et al.* 2022. *Mol Ther Methods Clin Dev.* 26:4. [PubMed](#)
19. Yue W, *et al.* 2019. *Nat Commun.* 10:2025. [PubMed](#)
20. Yao C, *et al.* 2018. *Autophagy.* 1.854861111. [PubMed](#)
21. Baldwin LA, *et al.* 2022. *Nat Commun.* 13:6539. [PubMed](#)
22. Muchenditsi A, *et al.* 2017. *Am J Physiol Gastrointest Liver Physiol.* 313:G39. [PubMed](#)
23. Sánchez-del-Campo L, *et al.* 2021. *J Exp Clin Cancer Res.* 40:117. [PubMed](#)
24. Di Pilato M, *et al.* 2021. *Cell.* 184(17):4512-4530.e22. [PubMed](#)
25. Renner K, *et al.* 2020. *Cell Reports.* 29(1):135-150.e9. [PubMed](#)
26. Pisano F, *et al.* 2014. *PLoS One.* 9:103541. [PubMed](#)
27. Rappe JCF, *et al.* 2021. *J Exp Med.* 218. [PubMed](#)
28. Ghosh M, *et al.* 2021. *Cancer Cell.* 39(4):494-508.e5. [PubMed](#)
29. Kennedy J, *et al.* 2014. *J Exp Med.* 211:2519. [PubMed](#)

**RRID** AB\_10612749 (BioLegend Cat. No. 137607)  
 AB\_10612758 (BioLegend Cat. No. 137608)

## Antigen Details

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<b>Structure</b>	Single-pass type I membrane protein, 46 kD; belongs to the natural cytotoxicity receptor (NCR) family; contains 2 Ig-like (immunoglobulin-like) domains
<b>Distribution</b>	Mature and immature NK cells, subset of NKT cells, but not on CD1d-restricted NKT cells
<b>Function</b>	NK cells activation
<b>Ligand/Receptor</b>	Viral hemagglutinins, heparan sulfate proteoglycans
<b>Cell Type</b>	NK cells, NKT cells
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	1. Colucci F and Cilio CM. 2010. <i>Nat. Immunol.</i> 125:60. 2. Caligiuri MA. 2008. <i>Blood</i> 112:461. 3. Colonna M. 2009. <i>Immunity</i> 31:15.
<b>Gene ID</b>	<a href="#">17086</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

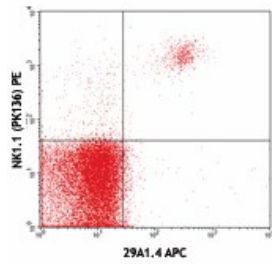
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Brilliant Violet 510™ anti-mouse CD335 (NKp46), Brilliant Violet 711™ anti-mouse CD335 (NKp46), PE anti-mouse CD335 (NKp46), PE/Cyanine7 anti-mouse CD335 (NKp46), Purified anti-mouse CD335 (NKp46), FITC anti-mouse CD335 (NKp46), APC anti-mouse CD335 (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)

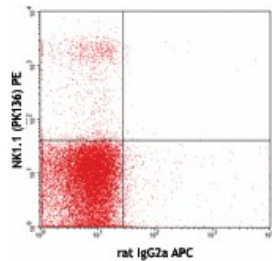
## Product Data

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



C57BL/6 mouse splenocytes stained with NK1.1 (PK136) PE and rat IgG2a APC isotype control



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