

## APC anti-human CD304 (Neuropilin-1) Antibody

<b>Catalog# / Size</b>	354505 / 25 tests 354506 / 100 tests
<b>Clone</b>	12C2
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	BDCA-4
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	CD304, also known as neuropilin-1, BDCA-4 and VEGF165R, is a 140 kD type I transmembrane protein. Its extracellular region contains 2 CUB, 2 FV/FVIII, and one MAM domain; a soluble isoform is produced by alternative mRNA splicing. CD304 is involved in angiogenesis, neural development, and tumor metastasis. It's expressed by plasmacytoid dendritic cells, thymocytes, neurons, endothelium, and a subset of T <sub>H</sub> 1 cells. CD304 is also expressed in several carcinomas, and a high expression of this molecule in prostate cancer correlates with a poor prognosis.

### Product Details

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	CD304-Fc Fusion protein
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Rosa TLSA, <i>et al.</i> 2022. Front Med (Lausanne). 9:899998. <a href="#">PubMed</a></li> <li>2. Alcántara-Hernández M <i>et al.</i> 2017. Immunity. 47(6):1037-1050. <a href="#">PubMed</a></li> <li>3. Bencze D, <i>et al.</i> 2022. Int J Mol Sci. 23:.. <a href="#">PubMed</a></li> <li>4. Leylek R, <i>et al.</i> 2019. Cell Rep. 29:3736. <a href="#">PubMed</a></li> <li>5. Cytlak U, <i>et al.</i> 2020. Immunity. 53(2):353-370. <a href="#">PubMed</a></li> <li>6. Leylek R, <i>et al.</i> 2020. Cell Rep. 32:108180. <a href="#">PubMed</a></li> </ol>
<b>RRID</b>	AB_11219393 (BioLegend Cat. No. 354505) AB_11219600 (BioLegend Cat. No. 354506)

### Antigen Details

<b>Structure</b>	Type I transmembrane protein, 140 kD, 2 complement binding domains (CUB), 2 coagulation factor V/VIII homology domains (FV/FVIII), one meprin, A5, receptor tyrosine phosphatase domain
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(MAM)

<b>Distribution</b>	Plasmacytoid dendritic cells, thymocytes, subset of follicular helper T cells (T <sub>FH</sub> ), endothelial cells, neurons, some carcinomas
<b>Function</b>	Angiogenesis, neuronal development, tumor metastasis
<b>Ligand/Receptor</b>	VEGF165, semaphorin-3A
<b>Cell Type</b>	Dendritic cells, Endothelial cells, Neurons, Tfh, Thymocytes
<b>Biology Area</b>	Angiogenesis, Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroscience, Synaptic Biology
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	1. Mizui M and Kikutani H. 2008. <i>Immunity</i> 28:302. 2. Hamerlik P, et al. 2012. <i>J. Exp. Med.</i> 209:507. 3. Karjalainen K, et al. 2011. <i>Blood</i> 117:920. 4. Lepelletier Y, et al. 2007. <i>P. Natl. Acad. Sci. USA</i> 104:5545.
<b>Gene ID</b>	<a href="#">8829</a>

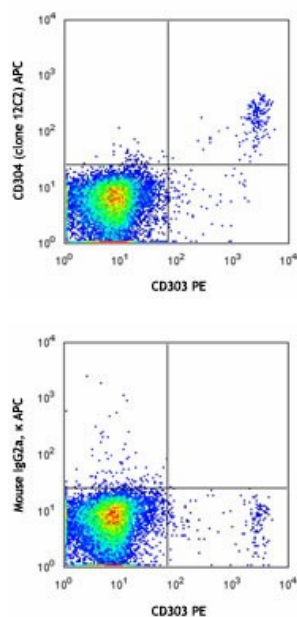
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD304 (Neuropilin-1), PE anti-human CD304 (Neuropilin-1), APC anti-human CD304 (Neuropilin-1), PE/Cyanine7 anti-human CD304 (Neuropilin-1), PerCP/Cyanine5.5 anti-human CD304 (Neuropilin-1), FITC anti-human CD304 (Neuropilin-1), Brilliant Violet 421™ anti-human CD304 (Neuropilin-1), Brilliant Violet 510™ anti-human CD304 (Neuropilin-1), Alexa Fluor® 647 anti-human CD304 (Neuropilin-1), Pacific Blue™ anti-human CD304 (Neuropilin-1), Biotin anti-human CD304 (Neuropilin-1), APC/Fire™ 750 anti-human CD304 (Neuropilin-1), TotalSeq™-A0406 anti-human CD304 (Neuropilin-1), TotalSeq™-C0406 anti-human CD304 (Neuropilin-1), TotalSeq™-B0406 anti-human CD304 (Neuropilin-1), Brilliant Violet 605™ anti-human CD304 (Neuropilin-1), Brilliant Violet 711™ anti-human CD304 (Neuropilin-1), TotalSeq™-D0406 anti-human CD304 (Neuropilin-1), PE/Dazzle™ 594 anti-human CD304 (Neuropilin-1), APC/Fire™ 810 anti-human CD304 (Neuropilin-1), PE/Fire™ 810 anti-human CD304 (Neuropilin-1)

## Product Data



Human peripheral blood mononuclear cells were stained with CD303 PE and CD304 (clone 12C2) APC (top) or mouse IgG2a, κ APC isotype control (bottom). Data shown was gated on the lymphocyte and monocyte populations.

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