

## APC/Fire™ 750 anti-human CD304 (Neuropilin-1) Antibody

<b>Catalog# / Size</b>	354523 / 25 tests 354524 / 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>H1</sub> 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/Fire™ 750 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.  * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Product Citations</b>	1. Rodda LB, <i>et al.</i> 2020. Cell. 184(1):169-183.e17. <a href="#">PubMed</a>
<b>RRID</b>	AB_2715882 (BioLegend Cat. No. 354523) AB_2715883 (BioLegend Cat. No. 354524)

### 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 (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>

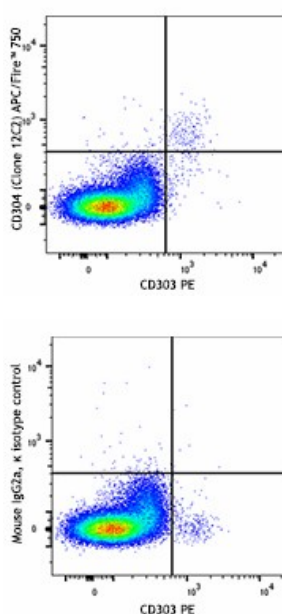
## Related Protocols

[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/Fire™ 750 (top) or mouse IgG2a, κ APC/Fire™ 750 isotype control (bottom).

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