

APC/Fire™ 810 anti-human CD304 (Neuropilin-1) Antibody

Catalog# / Size	354539 / 25 tests 354540 / 100 tests
Clone	12C2
Regulatory Status	RUO
Other Names	BDCA-4
Isotype	Mouse IgG2a, κ
Description	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 _H 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

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	CD304-Fc Fusion protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 810 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * APC/Fire™ 810 has a maximum excitation of 650 nm and a maximum emission of 810 nm. Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect APC/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our Fire Dyes page.
Excitation Laser	Red Laser (633 nm)
RRID	AB_2922570 (BioLegend Cat. No. 354539) AB_2922570 (BioLegend Cat. No. 354540)

Antigen Details

Structure	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)
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Distribution	Plasmacytoid dendritic cells, thymocytes, subset of follicular helper T cells (T _{FH}), endothelial cells, neurons, some carcinomas
Function	Angiogenesis, neuronal development, tumor metastasis
Ligand/Receptor	VEGF165, semaphorin-3A
Cell Type	Dendritic cells, Endothelial cells, Neurons, Tfh, Thymocytes
Biology Area	Angiogenesis, Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroscience, Synaptic Biology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 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.
Gene ID	8829

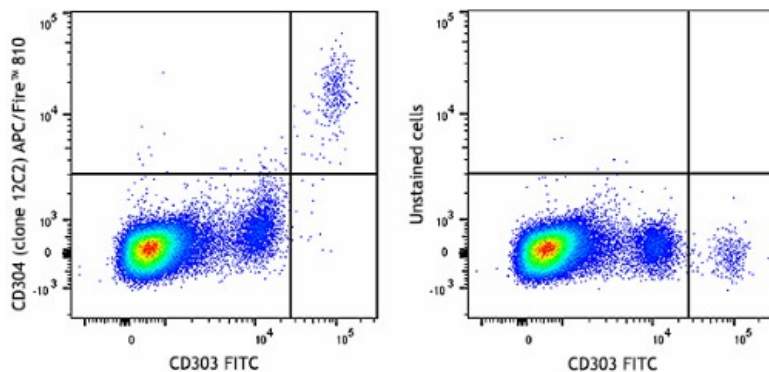
Related Protocols

[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 anti-human CD303 FITC and anti-human CD304 (Neuropilin-1) (clone 12C2) APC/Fire™ 810 (left) or stained with anti-human CD303 FITC only (right). Data shown was gated on the lymphocyte and monocyte populations.

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