

## TotalSeq™-D0406 anti-human CD304 (Neuropilin-1) Antibody

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| <b>Catalog# / Size</b>   | 354537 / 10 µg   |
| <b>Clone</b>             | 12C2   |
| <b>Regulatory Status</b> | RUO  |
| <b>Other Names</b>       | BDCA-4   |
| <b>Isotype</b>           | Mouse IgG2a, κ   |
| <b>Barcode Sequence</b>  | GGACTAAGTTTCGTT  |
| <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

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| <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 1 mM EDTA   |
| <b>Preparation</b>            | The antibody was purified by chromatography and conjugated with TotalSeq™-D oligomer under optimal conditions.   |
| <b>Concentration</b>          | 0.5 mg/mL  |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>  |
| <b>Application</b>            | <a href="#">PG - 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> and the oligomer sequence is confirmed by sequencing. TotalSeq™-D antibodies are compatible with <a href="#">Mission Bio's Tapestry Single-Cell Sequencing Platform</a> for simultaneous detection of DNA and Protein. |

To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.

Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.

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| <b>Additional Product Notes</b> | TotalSeq™-D reagents are designed to profile protein expression at single cell level. The <a href="#">Mission Bio Tapestry platform</a> and sequencer (e.g. Illumina analyzers) are required. Please contact <a href="#">technical support</a> for more information, or visit <a href="http://biolegend.com/totalseq/single-cell-dna">biolegend.com/totalseq/single-cell-dna</a> |
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The barcode flanking sequences are CGAGATGACTACGCTACTCATGG (PCR handle), and GAGCCGATCTAGTATCTCAGT\*C\*G (capture sequence). \* indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Application Technical Notes](#).

**RRID** AB\_2894620 (BioLegend Cat. No. 354537)

## Antigen Details

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|---------------------------|---|
| <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> | <ol style="list-style-type: none"><li>1. Mizui M and Kikutani H. 2008. <i>Immunity</i> 28:302.</li><li>2. Hamerlik P, <i>et al.</i> 2012. <i>J. Exp. Med.</i> 209:507.</li><li>3. Karjalainen K, <i>et al.</i> 2011. <i>Blood</i> 117:920.</li><li>4. Lepelletier Y, <i>et al.</i> 2007. <i>P. Natl. Acad. Sci. USA</i> 104:5545.</li></ol> |
| <b>Gene ID</b>            | <a href="#">8829</a>  |

## Related Protocols

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[TotalSeq™-D with Mission Bio Tapestri® Single-Cell DNA + Protein Protocol](#)

## Other Formats

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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)

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