SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human CD304 (Neuropilin-1)

Catalog # / Size: 2372680 / 100 tests
2372675 / 25 tests

Clone: 12C2

Isotype: Mouse IgG2a, κ

Immunogen: CD304-Fc Fusion protein

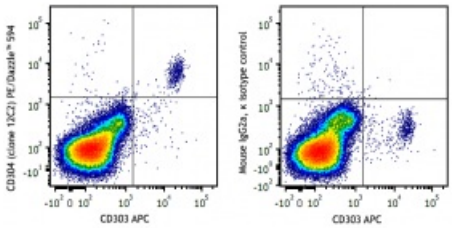
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Workshop Number: HCDM listed

Concentration: Lot-specific



Human peripheral blood mononuclear cells were stained with anti-human CD303 APC and anti-human CD304 (Neuropilin-1) (clone 12C2) PE/Dazzle™ 594 (left) or with mouse IgG2a, κ PE/Dazzle™ 594 isotype control (right). Data shown was gated on the lymphocyte and monocyte populations.

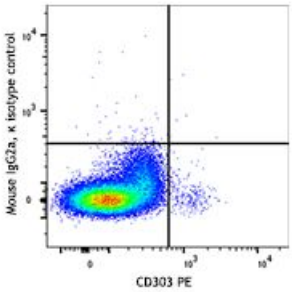
Applications:

Applications: Flow Cytometry

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.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes: Clone HA58 recognizes an epitope located in the extracellular D1 domain of CD54.[3]



Human peripheral blood granulocytes were stained with True-Stain Monocyte Blocker™ (Cat. No. 426103) and Siglec-9 (clone K8) APC/Fire™ 750 (filled histogram) or mouse IgG1, κ isotype control APC/Fire™ 750 (open histogram).

Application References:

1. Freeman A, *et al.* 2014. *PLoS One.* 9:110928. PubMed
2. Johnson P, *et al.* 2015. *Clin Cnacer Res.* 21:1321. PubMed

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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_{FH} cells. CD304 is also expressed in several carcinomas, and a high expression of this molecule in prostate cancer correlates with a poor prognosis.

Antigen References:

1. Mizui M and Kikutani H. 2008. *Immunity* 28:302.
2. Hamerlik P, *et al.* 2012. *J. Exp. Med.* 209:507.
3. Karjalainen K, *et al.* 2011. *Blood* 117:920.
4. Lepelletier Y, *et al.* 2007. *P. Natl. Acad. Sci. USA* 104:5545.