Product Data Sheet

Brilliant Violet 510™ anti-human CD304 (Neuropilin-1)

Catalog # / Size: 2372575 / 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 Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and

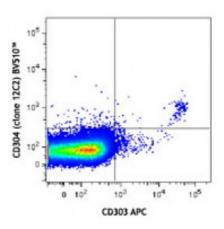
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



Human peripheral blood mononuclear cells were stained with CD303 APC and CD304 (clone 12C2) Brilliant Violet 510™ (top) or mouse IgG2a, κ Brilliant Violet 510™ isotype control (bottom). Data shown was gated on the lymphocyte and monocyte

Applications:

Applications: Flow Cytometry

Recommended

Usage:

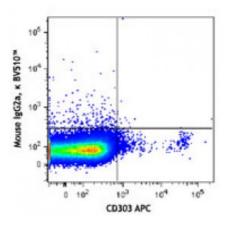
Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for

each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or

manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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.