

Brilliant Violet 421™ anti-human CD304 (Neuropilin-1)

Catalog # / Size: 2372570 / 100 tests
2372565 / 25 tests

Clone: 12C2

Isotype: Mouse IgG2a, κ

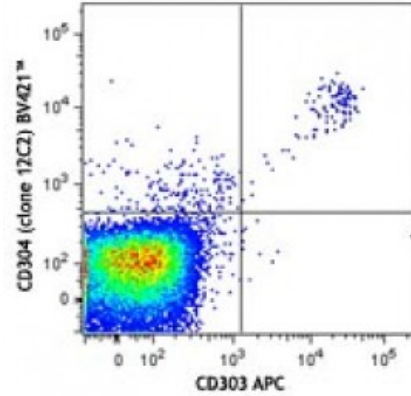
Immunogen: CD304-Fc Fusion protein

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

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

Concentration: Lot-specific



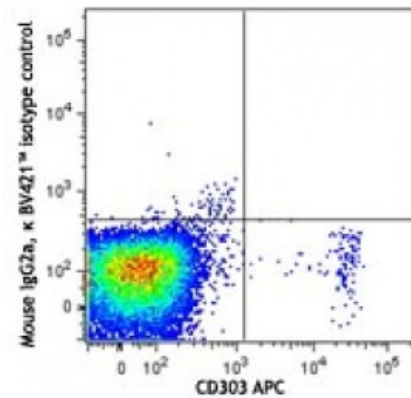
Human peripheral blood mononuclear cells were stained with CD303 APC and CD304 (clone 12C2) Brilliant Violet 421™ (top) or mouse IgG2a, κ Brilliant Violet 421™ isotype control (bottom). Data shown was gated on the lymphocyte populations.

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 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 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the 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.