

**APC/Fire™ 750 anti-human CD304 (Neuropilin-1)**

**Catalog # / Size:** 2372620 / 100 tests  
2372615 / 25 tests

**Clone:** 12C2

**Isotype:** Mouse IgG2a, κ

**Immunogen:** CD304-Fc Fusion protein

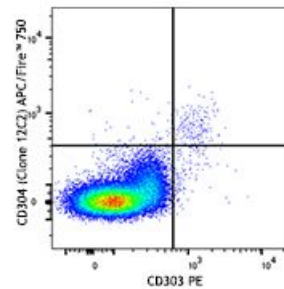
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 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 CD303 PE and CD304 (clone 12C2) APC/Fire™ 750 (top) or mouse IgG2a, κ APC/Fire™ 750 isotype control (bottom).

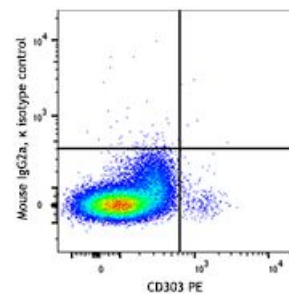
**Applications:**

**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.

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

**Application Notes:** Clone HA58 recognizes an epitope located in the extracellular D1 domain of CD54.<sup>3</sup>



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 Cancer Res*. 21:1321. [PubMed](#)

**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<sub>HH</sub> 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.