## **Product Data Sheet**

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

Catalog # /  $1326090 / 100 \mu g$ 

Size: 1326085 / 25 µg

Clone: 3E12

Isotype: Rat IgG2a, ĸ

Extracellular region of mouse CD304 Immunogen:

Reactivity: Mouse

The antibody was purified by affinity Preparation:

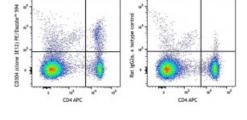
chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

Phosphate-buffered solution, pH 7.2, Formulation:

containing 0.09% sodium azide.

**Concentration:** 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with CD4 APC and CD304 (Neuropilin-1) (clone 3E12) PE/Dazzle™ 594 (left) or Rat IgG2a, κ PE/Dazzle<sup>™</sup> 594 isotype

control (right).

## **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 ≤0.125 μg per million cells in 100 μl volume. 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:

Additional reported applications (for the relevant formats) include: Western

blotting<sup>3</sup>. The S11 antibody reacts with pan-CD43.

Application References:

1. Blankenhaus B, et al. 2014. PLoS Pathog. 10:1003913. PubMed

2. Verhagen J and Wraith DC. 2014. J. Immunol. Methods. S0022. (FC)

**PubMed** 

3. Verhagen J, et al. 2014. PLoS One. 9e:108023. (FC) PubMed

**Description:** CD304, also known as neuropilin-1, is a 140 kD type I transmembrane

> protein. Its extracellular region contains two CUB, two FV/FVIII, and one MAM domain. It is expressed by natural regulatory T cells (nTreg), a subset of invariant natural killer T cells (iNKT), endothelial cells, and neurons. Neuropilin-1 stabilizes the interaction between Tregs and dendritic cells, contributes to the recruitment of tumor-infiltrating Tregs in response to tumor-derived VEGF, and influences the process of angiogenesis and axon

guidance. The ligands of CD304 are VEGF165 and semaphorin-3A.

**Antigen** References: 1. Yadav M, et al. 2012. J. Exp. Med. 209:1713.

2. Weiss JM, et al. 2012. J. Exp. Med. 209:1723. 3. Hansen W, et al. 2012. J. Exp. Med. 209:2001.

4. Milpied P, et al. 2011. Blood 118:2993.