Product Data Sheet

Purified anti-mouse CD304 (Neuropilin-1)

Catalog # / Size: 1326005 / 25 μg

1326010 / 100 µg

Clone: 3E12

Isotype: Rat IgG2a, κ

Immunogen: Extracellular region of mouse CD304

Reactivity: Mouse

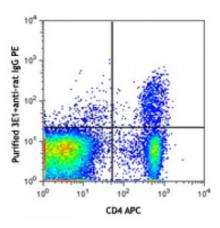
Preparation: The antibody was purified by affinity

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



C57BL/6 mouse splenocytes were stained with purified CD304 (clone 3E12, top) or purified rat IgG2a, κ isotype control (bottom), followed by anti-rat IgG PE. Splenocytes were then stained with mouse CD4 APC.

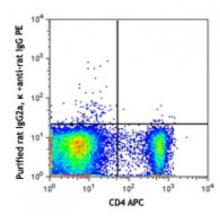
Applications:

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.



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