SONY

Product Data Sheet

PE/Cy7 anti-mouse CD304 (Neuropilin-1)

Catalog # / Size: 1326055 / 25 µg
1326060 / 100 µg

Clone: 3E12

Isotype: Rat IgG2a, κ

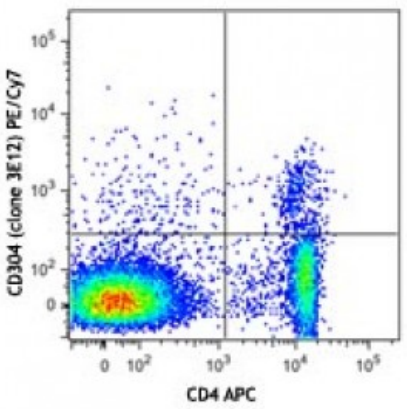
Immunogen: Extracellular region of mouse CD304

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: NULL

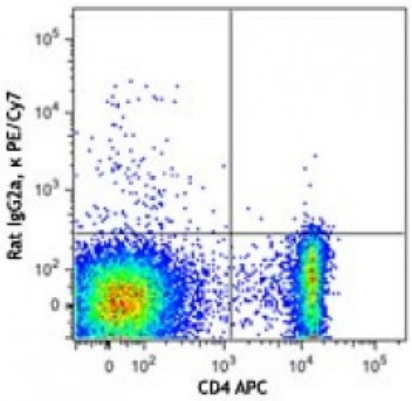


C57BL/6 mouse splenocytes were stained with CD4 APC and CD304 (clone 3E12) PE/Cy7 (top) or rat IgG2a, κ PE/Cy7 isotype control (bottom).

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 ≤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

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com