SONY

Product Data Sheet

Purified anti-mouse CD146

Catalog # / Size: 1273510 / 200 µg
1273505 / 50 µg

Clone: ME-9F1

Isotype: Rat IgG2a

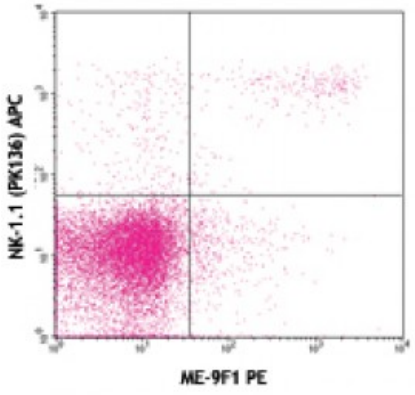
Immunogen: Endothelial cell line TME-3H3

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

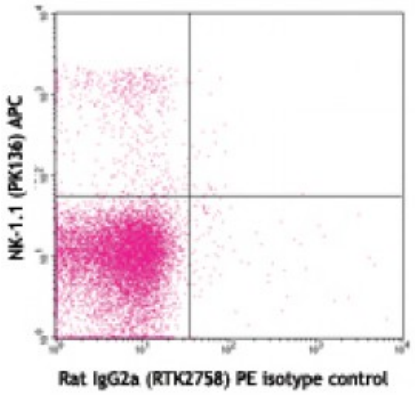


C57BL/6 splenocytes stained with ME-9F1 PE and NK-1.1 (PK136) APC

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.



C57BL/6 splenocytes stained with rat IgG2a (RTK2758) PE isotype control and NK-1.1 (PK136) APC

Application References:
1. Schrage A, *et al.* 2008. *Histochem. Cell. Biol.* 129:441.
2. Birbrair A, *et al.* 2013. *Am J Physiol Cell Physiol.* 305:1098. PubMed

Description: CD146, also known as melanoma cell adhesion molecule (MCAM or Mel-CAM), MUC18, S-Endo1, and A32 antigen, is an integral membrane glycoprotein that belongs to the Ig superfamily. CD146 is strongly expressed by murine vascular endothelial cells. It is expressed on about 30% of neutrophils and 60% of NK cells. Unlike in humans, CD146 is undetectable on monocytes, dendritic cells, T cells, NKT cells, B cells, or smooth muscle cells in mouse. It has been reported that an increase in CD146 expression is associated with NK cell maturation. Combined with using CD27 and CD11b staining, CD146 may be an alternative marker to detect final stages of NK cell maturation and define NK cell subsets. $CD146^{+}$ NK cells were found to be less cytotoxic and to produce less IFNγ than CD146- NK cells upon stimulation with target cells or activating antibodies. The role of CD146 on NK cell migration has yet to be investigated. The identification of CD146 ligand(s) will be crucial to address this issue.

Antigen References:
1. Despoix N, *et al.* 2008. *Eur. J. Immunol.* 38:2855.
2. Sorrentino A, *et al.* 2008. *Exp. Hematol.* 36:1035.

3. Bardin N, *et al.* 2009. *Arterioscler. Thromb. Vasc. Biol.* 29:746.