SONY

Product Data Sheet

PE/Cy7 anti-human CD141 (Thrombomodulin)

Catalog # / Size: 2320550 / 100 tests
2320545 / 25 tests

Clone: M80

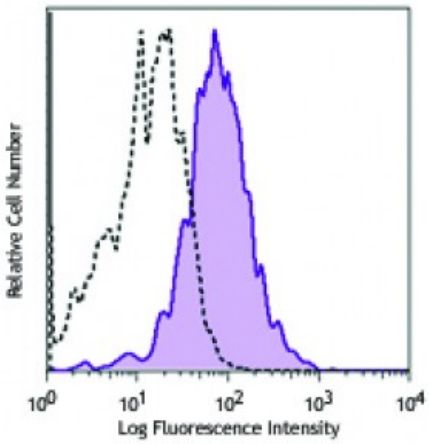
Isotype: Mouse IgG1, κ

Reactivity: Human

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 and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



LPS-stimulated (overnight) human peripheral blood monocytes were stained with CD141 (clone M80) PE/Cy7 (filled histogram) or mouse IgG1, κ PE/Cy7 isotype control (open histogram). Data shown was gated on the CD14+ cell population.

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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application References:
1. Lee J, *et al.* 2015. *J Exp Med.* 212:385. PubMed
2. Breton G, *et al.* 2015. *J Exp Med.* 212:401. PubMed

Description: CD141 is a 75 kD, single chain, type I membrane glycoprotein also known as thrombomodulin, TM, THRM, THBD, and fetomodulin. CD141 is an important cofactor in the protein C anticoagulant system. After binding to its ligand thrombin, CD141 activates protein C, which degrades clotting factors Va and VIIIa, and as a consequence the amount of thrombin is reduced. CD141 is expressed on macrophages, monocytes, a subpopulation of myeloid dendritic cells, vascular endothelial cells, and keratinocytes. Besides anti-coagulation function, CD141 is also involved in embryonic and atherosclerotic plaque development.

Antigen References:
1. Suzuki K, *et al.* 1987. *EMBO J.* 6:1891.
2. Esmon CT, *et al.* 1989. *J. Biol. Chem.* 264:4743.
3. Delvaeye M, *et al.* 2009. *N. Engl. J. Med.* 361:345.
4. Shi CS, *et al.* 2008.