## PE/Dazzle® 594 anti-human CD141 (Thrombomodulin)

Catalog # / Size: 2320600 / 100 tests

2320595 / 25 tests

Clone: M80

**Isotype:** Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

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

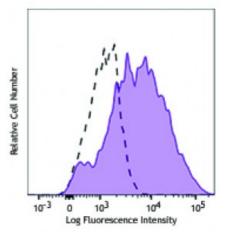
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

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

Concentration: Lot-specific



Human peripheral blood monocytes were stimulated with LPS (overnight) and then stained with CD141 (clone M80) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (open histogram).

## **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.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**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.