

Brilliant Violet 785™ anti-human CD141 (Thrombomodulin)

Catalog # / Size: 2320575 / 25 tests
2320580 / 100 tests

Clone: M80

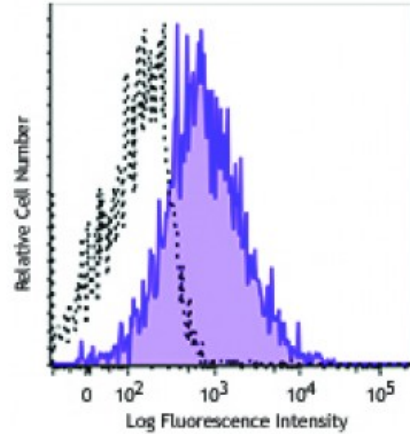
Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 785™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 785™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: 0.2



LPS-stimulated (overnight) human peripheral blood monocytes were stained with CD141 (clone M80) Brilliant Violet 785™ (filled histogram) or mouse IgG1, κ Brilliant Violet 785™ isotype control (open histogram). Data shown was gated on mon

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.

Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 785™ is a trademark of Sirigen Group Ltd.

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.