SONY

Product Data Sheet

Brilliant Violet 785™ anti-human CD141 (Thrombomodulin)

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

Clone: M80

Isotype: Mouse IgG1, κ

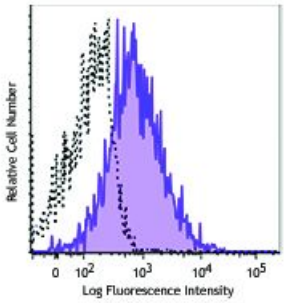
Reactivity: Human, Non-human primate

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

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

Workshop Number: V B-CD73.3

Concentration: Lot-specific



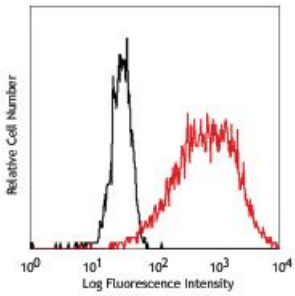
LPS-stimulated (overnight) human peripheral blood monocytes were stained with CD141 (clone M80) Brilliant Violet 785™ (filled histogram) or mouse IgG1, κBrilliant Violet 785™ isotype control (open histogram). Data shown was gated on monocyte population.

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 µl per million cells or 5 µl per 100 µl 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.



For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.
Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

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. *Blood* 112:3661.
5. Chen LC, *et al.* 2009. *J. Infect.* 58:368.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.