

Spark Blue™ 515 anti-human CD141 (Thrombomodulin) Antibody

Catalog# / Size	344137 / 25 tests 344138 / 100 tests
Clone	M80
Regulatory Status	RUO
Other Names	Thrombomodulin, TM, THRM, THBD, Fetomodulin, BDCA-3
Isotype	Mouse IgG1, κ
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.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark Blue™ 515 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark Blue™ 515 has a maximum excitation of 490 nm and a maximum emission of 515 nm.
Excitation Laser	Blue Laser (488 nm)
RRID	AB_3675064 (BioLegend Cat. No. 344137) AB_3675064 (BioLegend Cat. No. 344138)

Antigen Details

Structure	Single chain, type I membrane glycoprotein, 75 kD
Distribution	Macrophages, monocytes, subset of myeloid dendritic cells, vascular endothelial cells, keratinocytes

Function	After thrombin binding, CD141 activates protein C, which degrades clotting factors Va and VIIIa and reduces the amount of thrombin generated.
Interaction	Protein C, Thrombin-activatable fibrinolysis inhibitor (TAFI), Platelet factor 4 (PF4)
Ligand/Receptor	Thrombin
Cell Type	Dendritic cells, Endothelial cells, Macrophages, Monocytes
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Suzuki K, <i>et al.</i> 1987. <i>EMBO J.</i> 6:1891. 2. Esmon CT, <i>et al.</i> 1989. <i>J. Biol. Chem.</i> 264:4743. 3. Delvaeye M, <i>et al.</i> 2009. <i>N. Engl. J. Med.</i> 361:345. 4. Shi CS, <i>et al.</i> 2008. <i>Blood</i> 112:3661. 5. Chen LC, <i>et al.</i> 2009. <i>J. Infect.</i> 58:368.
Gene ID	7056

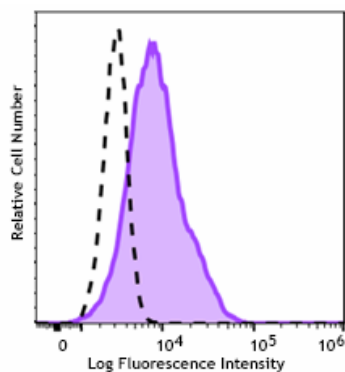
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD141 (Thrombomodulin), PE anti-human CD141 (Thrombomodulin), APC anti-human CD141 (Thrombomodulin), Biotin anti-human CD141 (Thrombomodulin), PE/Cyanine7 anti-human CD141 (Thrombomodulin), PerCP/Cyanine5.5 anti-human CD141 (Thrombomodulin), Brilliant Violet 421™ anti-human CD141 (Thrombomodulin), Brilliant Violet 785™ anti-human CD141 (Thrombomodulin), Brilliant Violet 605™ anti-human CD141 (Thrombomodulin), PE/Dazzle™ 594 anti-human CD141 (Thrombomodulin), TotalSeq™-A0163 anti-human CD141 (Thrombomodulin), Alexa Fluor® 647 anti-human CD141 (Thrombomodulin), TotalSeq™-C0163 anti-human CD141 (Thrombomodulin), TotalSeq™-B0163 anti-human CD141 (Thrombomodulin), KIRAVIA Blue 520™ anti-human CD141 (Thrombomodulin), TotalSeq™-D0163 anti-human CD141 (Thrombomodulin), PE/Fire™ 810 anti-human CD141 (Thrombomodulin), Brilliant Violet 711™ anti-human CD141 (Thrombomodulin), Spark Blue™ 515 anti-human CD141 (Thrombomodulin)

Product Data



Human peripheral blood monocytes were stained with anti-human CD141 (Thrombomodulin) (clone M80) Spark Blue™ 515 (filled histogram) or mouse IgG1, κ Spark Blue™ 515 isotype control (open histogram).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587