

Technical Data Sheet

BB700 Rat Anti-Mouse CD144

Product Information

Material Number:	742179
Size:	50 µg
Clone:	11D4.1
Alternative Name:	Cdh5; Cadherin-5; CADH5; VE-cadherin; Vascular endothelial cadherin; 7B4
Reactivity:	Mouse (Tested in Development)
Isotype:	Rat LEW, also known as Lewis IgG2a, κ
Immunogen:	Mouse VE-Cadherin-Ig Fusion
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Workshop No.:	None
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The 11D4.1 antibody monoclonal antibody specifically binds to mouse CD144, also known as VE-cadherin. CD144 is a type I transmembrane protein and is a member of the cadherin superfamily. VE-cadherin is an endothelial cell-specific, homophilic adhesion molecule. It is concentrated at interendothelial cells contacts and is thought to be involved in the maintenance of cell layer integrity. In vitro and in vivo studies indicate that the 11D.4 mAb interferes with VE-cadherin-mediated intercellular adhesion.

The antibody was conjugated to BD Horizon™ BB700, which is part of the BD Horizon Brilliant™ Blue family of dyes. It is a polymer-based tandem dye developed exclusively by BD Biosciences. With an excitation max of 485 nm and an emission max of 693 nm, BD Horizon BB700 can be excited by the 488 nm laser and detected in a standard PerCP-Cy™5.5 set (eg, 695/40-nm filter). This dye provides a much brighter alternative to PerCP-Cy5.5 with less cross laser excitation off the 405 nm and 355 nm lasers.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with BD Horizon BB700 under optimal conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794 or 566349).

When setting up compensation, it is recommended to compare spillover values obtained from cells and BD™ CompBeads to ensure that beads will provide sufficiently accurate spillover values.

For optimal results, it is recommended to perform two washes after staining with antibodies. Cells may be prepared, stained with antibodies and washed twice with wash buffer per established protocols for immunofluorescent staining prior to acquisition on a flow cytometer. Performing fewer than the recommended wash steps may lead to increased spread of the negative population.

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	
554657	Stain Buffer (BSA)	500 mL	
563794	Brilliant Stain Buffer	100 Tests	
555899	Lysing Buffer	100 mL	

Product Notices

1. This antibody was developed for use in flow cytometry.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. Researchers should determine the optimal concentration of this reagent for their individual applications.
4. An isotype control should be used at the same concentration as the antibody of interest.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. BD Horizon Brilliant Blue 700 is covered by one or more of the following US patents: 8,455,613 and 8,575,303.
10. Cy is a trademark of GE Healthcare.

References

- Breier G, Breviario F, Caveda L, et al. Molecular cloning and expression of murine vascular endothelial-cadherin in early stage development of cardiovascular system.. *Blood*. 1996; 87(2):630-41.
- Gotsch U, Borges E, Bosse R, et al. VE-cadherin antibody accelerates neutrophil recruitment in vivo. *J Cell Sci*. 1997; 110(5):583-588.
- Lampugnani MG, Resnati M, Raiteri M, et al. A novel endothelial-specific membrane protein is a marker of cell-cell contacts.. *J Cell Biol*. 1992; 118(6):1511-22.

BD Biosciences

bdbiosciences.com

United States
877.232.8995

Canada
888.268.5430

Europe
32.53.720.550

Japan
0120.8555.90

Asia Pacific
65.6861.0633

Latin America/Caribbean
0800.771.7157

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for a patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

©2020 BD. All rights reserved. Unless otherwise noted, BD, the BD Logo and all other trademarks are the property of Becton, Dickinson and Company or its affiliates.

