

Technical Data Sheet

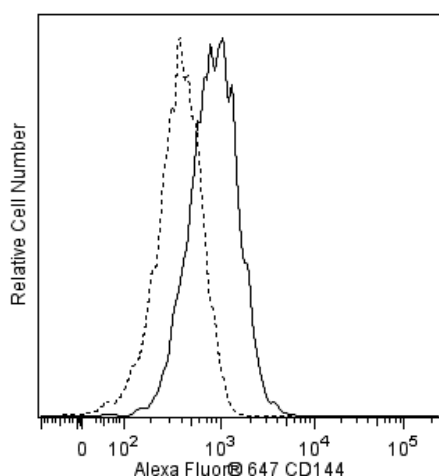
Alexa Fluor® 647 Rat Anti-Mouse CD144

Product Information

Material Number:	562242
Alternate Name:	Cdh5; Cadherin-5; CADH5; VE-cadherin; Vascular endothelial cadherin; 7B4
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	11D4.1
Immunogen:	Mouse VE-Cadherin-Ig Fusion
Isotype:	Rat (LEW) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

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 11D4 mAb interferes with VE-cadherin-mediated intercellular adhesion.



Flow cytometric analysis of CD144 expressed on mouse bEnd.3 cells (ATCC# CRL-2299). Mouse bEnd.3 cells were stained with either Alexa Fluor® 647 Rat Anti-Mouse CD144 (Cat. No. 562242, solid line histogram) or an Alexa Fluor® 647 Rat IgG2a, κ Isotype Control (Cat. No. 557690; dashed line histogram). Flow cytometric fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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 to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunofluorescence	Tested During Development

Suggested Companion Products

Catalog Number	Name	Size	Clone
557690	Alexa Fluor® 647 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

BD Biosciences

bdbiosciences.com

United States 877.232.8995 Canada 866.979.9408 Europe 32.2.400.98.95 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

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 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.

© 2016 BD. BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.



Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
4. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
5. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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. (Biology)
- Gotsch U, Borges E, Bosse R, et al. VE-cadherin antibody accelerates neutrophil recruitment in vivo. *J Cell Sci*. 1997; 110(5):583-588. (Immunogen: Blocking, Immunoprecipitation)
- 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. (Biology)