

Technical Data Sheet

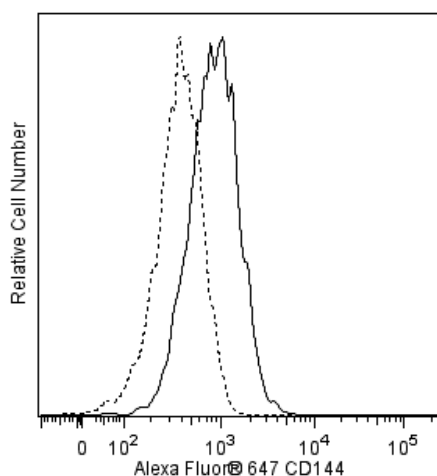
Alexa Fluor® 647 Rat Anti-Mouse CD144

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 11D4.1 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
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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)

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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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4. 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.
5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
6. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
7. 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.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
9. All other brands are trademarks of their respective owners.

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):630-641. (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*. 1996; 118(6):1511-1522. (Biology)

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