Technical Data Sheet

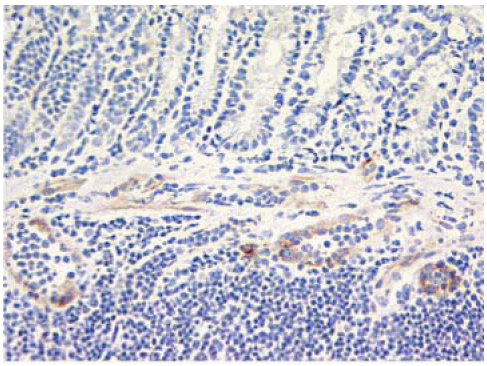
Purified Rat Anti-Mouse CD144

Product Information

Material Number:	**550548**
Alternate Name:	VE-Cadherin, Cadherin-5
Size:	1.0 ml
Concentration:	125 µg/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 BSA, goat serum, and ≤0.09% sodium azide.

Description

The 11D4.1 antibody reacts with mouse VE-cadherin, a member of the cadherin family. 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.



Immunohistochemical staining of CD144. *Frozen sections of normal mouse small intestine were reacted with the anti-CD144 antibody. Cells expressing VE-Cadherin can be identified by the brown labeling of their cell membranes. Amplification 20X.*

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Recommended Assay Procedure:

Immunohistochemistry: The 11D4.1 antibody (Cat. No. 550548) is recommended to test for immunohistochemical staining of acetone-fixed frozen sections. The isotype control recommended for use with this antibody is purified rat IgG2a (Cat. No. 559073). For optimal indirect immunohistochemical staining, the 11D4.1 antibody should be titrated (1:10 to 1:50 dilution) and visualized via a three-step staining procedure in combination with biotinylated polyclonal anti-rat Ig (multiple adsorbed) (Cat. No. 559286) as the secondary antibody and Streptravidin-HRP (Cat. No. 550946) together with the DAB detection system (Cat. No. 550880). **The clone 11D4.1 is not recommended for formalin-fixed paraffin embedded sections.**

Suggested Companion Products

Catalog Number	Name	Size	Clone
559073	Purified Rat IgG2a κ Isotype Control	0.25 mg	R35-95
559286	Biotin Goat Anti-Rat Ig	0.5 mg	Polyclonal
550946	Streptavidin HRP	50 ml	(none)
550880	DAB Substrate Kit	500 tests	(none)
559148	Antibody Diluent for IHC	125 ml	(none)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. An isotype control should be used at the same concentration as the antibody of interest.
5. This antibody has been developed for the immunohistochemistry application. However, a routine immunohistochemistry test is not performed on every lot. Researchers are encouraged to titrate the reagent for optimal performance.
6. 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):630-641. (Biology: Immunohistochemistry)

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)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**