

Technical Data Sheet

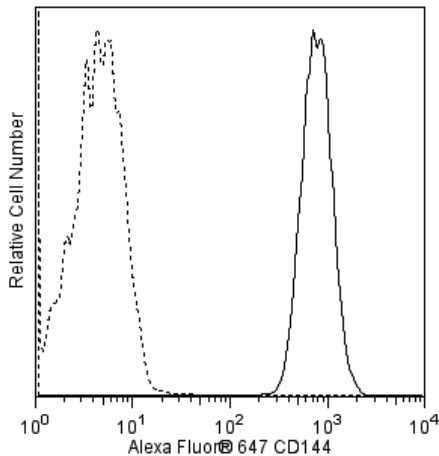
Alexa Fluor® 647 Mouse Anti-Human CD144

Product Information

Material Number:	561567
Alternate Name:	VE-cadherin; Cadherin-5; CDH5; Vascular endothelial cadherin
Size:	50 tests
Vol. per Test:	5 µl
Clone:	55-7H1
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VI E092
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The 55-7H1 antibody reacts with a calcium-independent epitope on cadherin-5, a member of the cadherin family of calcium-dependent adhesion molecules. Cadherin-5 is expressed on endothelial cells in vivo and in vitro. It may play a role in the organization of lateral endothelial junctions and in the control of permeability properties of vascular endothelium.



**Flow cytometric analysis of CD144 expression on human HUVEC cells.** HUVEC cells (Lonza, Cat No. CC-2519) were stained with Alexa Fluor® 647 Mouse anti-Human CD144 antibody (Cat. No. 561567, solid line histogram) or an Alexa Fluor® 647 mIgG1, κ Isotype Control (Cat. No. 557714; 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 Cytometry 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
557714	Alexa Fluor® 647 Mouse IgG1 κ Isotype Control	100 tests	MOPC-21
554656	Stain Buffer (FBS)	500 ml	(none)

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## Product Notices

1. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
2. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. 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.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
8. 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.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).

## 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)

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)

Vincent PA, Xiao K, Buckley KM, Kowalczyk AP. VE-cadherin: adhesion at arm's length. *Am J Physiol Cell Physiol*. 2004; 286:C987-C997. (Biology)