BioLegend
The path to legendary discovery™

Product Data Sheet

Alexa Fluor® 647 anti-mouse CD144 (VE-cadherin)

Catalog # / Size: 138005 / 25 µg
138006 / 100 µg

Clone: BV13

Isotype: Rat IgG1

Immunogen: VE-cadherin-Ig fusion protein

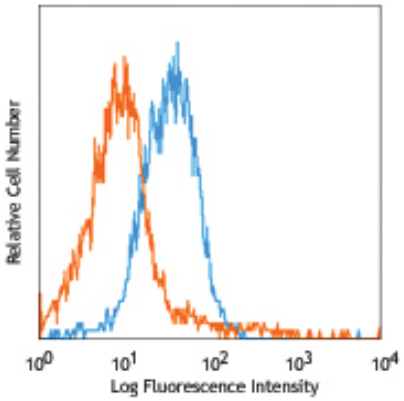
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Mouse endothelial cells b.End.3 stained with BV13 Alexa Fluor® 647

Applications:

Applications: FC - *Quality tested*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.
** Alexa Fluor® 647 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 647 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Clone BV13 recognizes an epitope between aa 45 and 56, and has a binding affinity of 5-15 nM.[5] Additional reported applications (for relevant formats) include: Western blotting[1], blocking of cell interactions *in vivo*[1], and immunofluorescence microscopy[4].

Application References:
1. Corada M, *et al.* 1999. *P. Natl. Acad. Sci. USA* 96:9815. (WB, Block)
2. Liao F, *et al.* 2000. *Cancer Res.* 60:6805. (FC)
3. Crosby CV, *et al.* 2005. *Blood* 105:2771. (FC)
4. Liao F, *et al.* 2002. *Cancer Res.* 62:2567. (IF)
5. May C, *et al.* 2005. *Blood* 105:4337. (epitope)

Description: CD144, also known as vascular endothelial-cadherin (VE-cadherin), is a 120 kD member of the type II Cadherin family. It is an endothelial specific hemophilic adhesion molecule involved in endothelial cell survival, migration, contact-dependent growth inhibition, and homophilic adhesion. VE-cadherin is essential for maintaining the integrity of the endothelial barrier *in vivo*.

Antigen References:
1. Allport JR, *et al.* 2002. *J. Leukocyte Biol.* 71:821.
2. Hirashima M, *et al.* 2009. *Blood* 93:1253.
3. Matsuyoshi N, *et al.* 1997. *Proc. Assoc. Am. Physicians* 109:362.
4. Matsumura K, *et al.* 2003. *Blood* 101:1367.
5. Hirashima M, *et al.* 2009. *Blood* 101:2261.
6. Gotsch U, *et al.* 1997. *J. Cell Sci.* 110:583.
7. Kataoka H, *et al.* 1997. *Dev. Growth Differ.* 39:729.

Related Products:

Product	Clone	Application
Alexa Fluor® 647 Rat IgG1, κ Isotype Ctrl	RTK2071	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
TruStain fcX™ (anti-mouse CD16/32)	93	FC

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