SONY

Product Data Sheet

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

Catalog # / Size: 1290030 / 100 µg
1290025 / 25 µg

Clone: BV13

Isotype: Rat IgG1, κ

Immunogen: VE-cadherin-Ig fusion protein

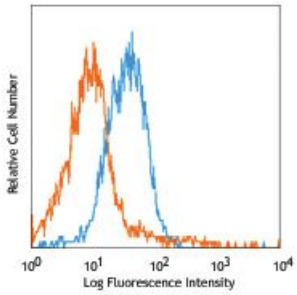
Reactivity: Mouse

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

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

Workshop Number: HCDM listed

Concentration: 0.5



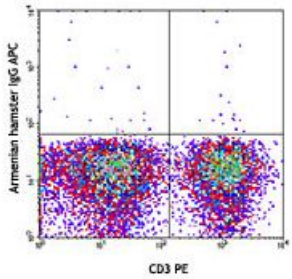
Mouse endothelial cells b.End.3 stained with BV13 Alexa Fluor® 647

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric 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.



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 blotting1, blocking of cell interactions *in vivo*1, and immunofluorescence microscopy4.

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)

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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.

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