BioLegend
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Product Data Sheet

Alexa Fluor® 647 anti-human CD202b (Tie2/Tek)

Catalog # / Size: 334209 / 25 tests
334210 / 100 tests

Clone: 33.1 (Ab33)

Isotype: Mouse IgG1 κ

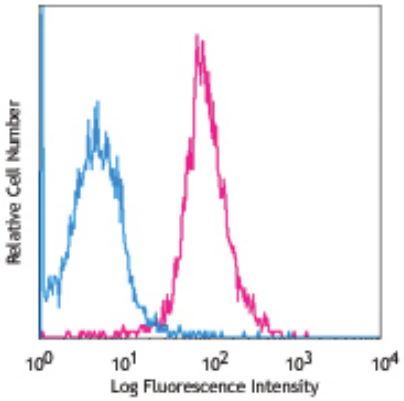
Immunogen: Recombinant extracellular domain of human Tie2

Reactivity: Human

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 and 0.2% (w/v) BSA (origin USA).

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



Human endothelial cell line, HUVEC, stained with 33.1 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 5 µl per million cells or 5 µl per 100 µl of whole blood. 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 633nm / 635nm.
** Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 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: Additional reported applications include: immunoprecipitation, Wstern blot, immunohistochemical staining of frozen tissue sections and ELISA

Application References:
1.Peters KG, *et al.* 1998. *Br. J. Cancer*. 77:51.
2.Wong AL, *et al.* 1997. *Circ. Res*. 81:567.
3.Lin P, *et al.* 1998. *P. Natl. Acad. Sci. USA* 95:8829.

Description: CD202b is a 145 kD type I transmembrane protein, also known as Tie2 or TEK. It is a member of the receptor tyrosine kinase (RTK) family of proteins and is expressed by endothelial cells and their progenitors, quiescent hematopoietic stem cells (HSCs), and a subpopulation of monocytes. Angiopoietin-1 (Ang-1) is an activator of CD202b to promote, maintain, and stabilize mature vessels and to maintain HSCs in quiescent state. Ang-2 is another ligand of CD202b, which is involved in postnatal angiogenesis and in antagonizing the effects of Ang-1. Tie2 binds to Ang-4 as well.

Antigen References:
1.De Palma M, *et al.* 2005. *Cancer Cell*. 8:211
2.Shaw JP, *et al.* 2004. *Blood Cells Mol.* Dis. 32:168
3. Hsu HC, *et al.* 2000. *Blood*. 96:3757
4. Arai F, *et al.* 2004. *Cell.* 118:149

Related Products:

Product	Clone	Application
Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (FC)	MOPC-21	FC, IF
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC

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