

Biotin anti-mouse CD105

Catalog # / Size: 1202015 / 50 µg
1202020 / 500 µg

Clone: MJ7/18

Isotype: Rat IgG2a, κ

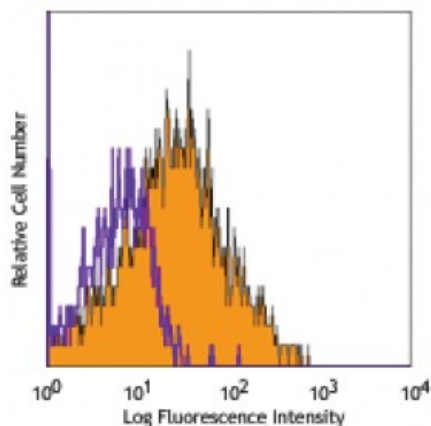
Immunogen: inflamed mouse skin

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

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

Concentration: 0.5



BEND.3, mouse endothelial cells stained with MJ7/18 biotin, followed Sav-PE

Applications:

Applications: Flow Cytometry, Immunohistochemistry

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications include: immunoprecipitation, Western blotting, and immunofluorescence histochemistry or immunohistochemistry of acetone-fixed frozen sections²⁻⁴.

Application References:

1. Ge AZ and Butcher EC. 1994. *Gene* 138:201.
2. Baluk P, *et al.* 2003. *Am. J. Pathol.* 163:1801. (IHC)
3. Takahashi T, *et al.* 2003. *Mol. Cell Biol.* 23:1817. (IHC)
4. Savinov AY, *et al.* 2003. *J. Exp. Med.* 197:643. (IHC)
5. Gustafsson K, *et al.* 2013. *Exp Cell Res.* 319:1852. [PubMed](#)

Description: CD105 is a 90 kD homodimeric type I integral membrane glycoprotein, also known as endoglin. It is expressed on endothelial cells (especially on angiogenic endothelial cells) and upregulated by hypoxia, activated monocytes, macrophages, bone marrow stromal cells, and some cytotrophoblasts. CD105 is a receptor for TGF-β1, TGF-β3 and modulates TGF-β signaling by interacting with TGF-β receptors I and/or II. CD105 also binds other growth factors such as actvin A, BMP-2, and BMP-7. CD105 has been show to be a useful marker for identifying proliferating endothelium involved in tumor angiogenesis and can be used for tumor imaging and prognosis, and has therapeutic potential for some solid tumors and other angiogenic diseases.

Antigen References:

1. Gougos A and M. Letarte 1988. *J. Immunol.* 141:1925.
2. Cheifetz S, *et al.* 1992. *J. Bio. Chem.* 267:19027.
3. Barbara NP, *et al.* 1999. *J. Bio. Chem.* 274:584.
4. Lastres P, *et al.* 199