SONY

Product Data Sheet

Alexa Fluor® 488 anti-mouse CD105

Catalog # / Size:	1202025 / 25 µg 1202030 / 100 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 Alexa Fluor® 488 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5

Applications:

Applications:	Immunofluorescence
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 ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.
Application Notes:	Additional reported applications include: immunoprecipitation, Western blotting, and immunofluorescence histochemistry or immunohistochemistry of acetone-fixed frozen sections[2-4].

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)

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