

ProteinFind® Anti-CD105 Mouse Monoclonal Antibody

Please read the datasheet carefully prior to use.

Cat. No. HS905

Version No. Version 2.0

Storage: PBS (pH7.4), 0.05% ProClin 300, 50% Glycerol; at -20°C for two years, avoid repeated freeze-thawing.

Description

CD105, also known as endothelial glycoprotein, is a homodimer transmembrane protein linked by disulfide bonds. CD105 is a co-receptor of TGF- β receptor complex and plays a role in related signal transduction pathways^[1,2]. CD105 is highly expressed in vascular endothelial cells and is a marker molecule of tumor angiogenesis^[3]. In addition, CD105 is also expressed on the surface of activated monocytes and macrophages^[4]. It plays an important role in angiogenesis regulation^[5,6]. This product is the mouse anti-human CD105 monoclonal antibody, which is used for the specific detection of human CD105 by FC.

Species Reactivity: Human

Clone Number: Trans-7B2

Antibody Subtype: Mouse IgG1

Immunogen

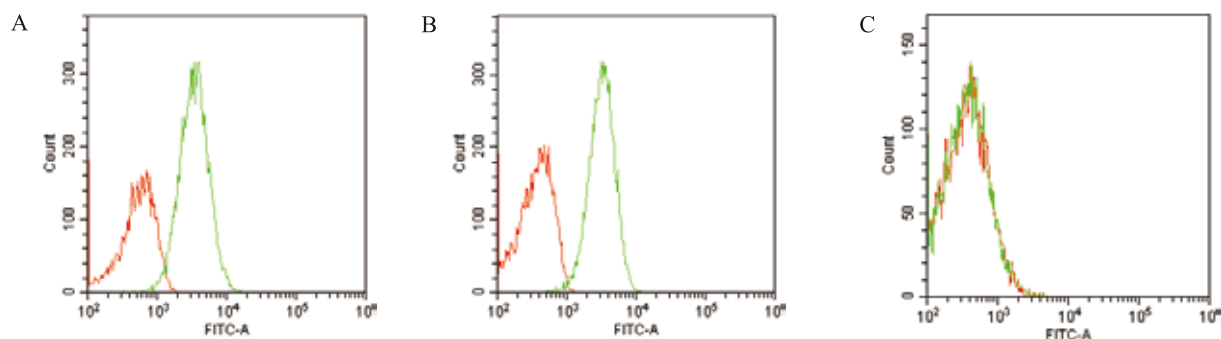
- Recombinant human CD105 partial extracellular domain
- Entrez Gene ID: 2022
- UniProt ID: P17813

Applicable Experiments and Dilution

- FC: 1:100 dilution is recommended.

Positive Control Cell Line: Mesenchymal stem cells (MSC), U-937 cells

★ **Advanced Validation:** The antibody was validated by the relative expression of protein levels in different cell lines.



FC: ProteinFind® Anti-CD105 Mouse Monoclonal Antibody (green) for FC detection of MSC (positive cells) (figure A), U-937 cells (positive cells) (figure B) and Jurkat cells (negative cells) (figure C).

The negative control was Mouse IgG1 Isotype Control (red).

Dilution ratio of primary antibody: 1:100



References

- [1] Bernabeu C, Conley BA, Vary CPH. Novel biochemical pathways of endoglin in vascular cell physiology [J]. Journal of Cellular Biochemistry. 2007, 102(6): 1375-88.
- [2] Zhu Y, Sun Y, Xie L, et al. Hypoxic induction of endoglin via mitogen-activated protein kinases in mouse brain microvascular endothelial cells [J]. Stroke. 2003, 34(10): 2483-8.
- [3] Fonsatti E, Sigalotti L, Arslan P, et al. Emerging role of endoglin (CD105) as a marker of angiogenesis with clinical potential in human malignancies [J]. Curr Cancer Drug Targets. 2003, 3(6): 427-32.
- [4] Lastres P, Bellon T, Cabañas C, et al. Regulated expression on human macrophages of endoglin, an Arg-Gly-Asp-containing surface antigen [J]. Eur J Immunol. 1992, 22(2): 393-7.
- [5] Castonguay R, Werner ED, Matthews RG, et al. Soluble endoglin specifically binds bone morphogenetic proteins 9 and 10 via its orphan domain, inhibits blood vessel formation, and suppresses tumor growth [J]. J Biol Chem. 2011, 286(34): 30034-46.
- [6] Nolan-Stevaux O, Zhong W, Culp S, et al. Endoglin requirement for BMP9 signaling in endothelial cells reveals new mechanism of action for selective anti-endoglin antibodies [J]. PLoS One. 2012, 7(12): e50920.

For research use only, not for clinical diagnosis.

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Service telephone +86-10-57815020

Service email complaints@transgen.com

