

11-714-C025

Monoclonal Antibody to CD105 (mouse) Purified Antibody (0.025 mg)

Clone:	MJ7/18
Isotype:	Rat IgG2a
Specificity:	The rat monoclonal antibody MJ7/18 reacts with CD105 (Endoglin), a 90 kDa type I homodimerizing membrane glycoprotein expressed on vascular endothelial cells (small and large vessels), activated monocytes and tissue macrophages, stromal cells of certain tissues including bone marrow, pre-B lymphocytes in fetal marrow and erythroid precursors in fetal and adult bone marrow.
Regulatory Status:	RUO
Immunogen:	Inflamed mouse skin
Species Reactivity:	Mouse
Application:	Flow Cytometry Immunoprecipitation Western Blotting Immunohistochemistry (frozen sections)
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-G affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD105 (Endoglin) is a homodimeric transmembrane glycoprotein serving in presence of TGFbetaR-2 as a receptor for TGFbeta-1 and TGFbeta-3. CD105 is highly expressed on endothelial cells and promotes angiogenesis during wound healing, infarcts and in a wide range of tumours and its gene expression is stimulated by hypoxia. CD105 prevents apoptosis in hypoxic endothelial cells and also antagonises the inhibitory effects of TGFbeta-1 on vascular endothelial cell growth and migration. Normal cellular levels of CD105 are required for formation of new blood vessels.

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References:

*Rosu-Myles M, She YM, Fair J, Muradia G, Mehic J, Menendez P, Prasad SS, Cyr TD: Identification of a candidate proteomic signature to discriminate multipotent and non-multipotent stromal cells. PLoS One. 2012;7(6):e38954. doi: 10.1371/journal.pone.0038954.

*Cho SK, Bourdeau A, Letarte M, Zúñiga-Pflücker JC: Expression and function of CD105 during the onset of hematopoiesis from Flk1(+) precursors. Blood. 2001 Dec 15;98(13):3635-42.

*Warrington K, Hillarby MĆ, Li C, Letarte M, Kumar S: Functional role of CD105 in TGF-beta1 signalling in murine and human endothelial cells. Anticancer Res. 2005 May-Jun;25(3B):1851-64.

*Fonsatti E, Nicolay HJ, Altomonte M, Covre A, Maio M: Targeting cancer vasculature via endoglin/CD105: a novel antibody-based diagnostic and therapeutic strategy in solid tumours. Cardiovasc Res. 2010 Apr 1;86(1):12-9. doi: 10.1093/cvr/cvp332.

*Herouet C, Cottin M, LeClaire J, Enk A, Rousset F: Contact sensitizers specifically increase MHC class II expression on murine immature dendritic cells. In Vitr Mol Toxicol. 2000 Summer;13(2):113-23.

*Dassler K, Roohi F, Lohrke J, Ide A, Remmele S, Hütter J, Pietsch H, Pison U, Schütz G: Current limitations of molecular magnetic resonance imaging for tumors as evaluated with high-relaxivity CD105-specific iron oxide nanoparticles. Invest Radiol. 2012 Jul;47(7):383-91

*Ge AZ, Butcher EC: Cloning and expression of a cDNA encoding mouse endoglin, an endothelial cell TGF-beta ligand. Gene. 1994 Jan 28;138(1-2):201-6.

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