

## Anti-mouse CD105/Endoglin

**Description:** Produced from sera of rabbits immunised with highly pure recombinant mouse soluble CD105/Endoglin produced in insect cells. The recombinant soluble CD105/Endoglin consists of amino acid 26 (Glu) to 581 (Gly) and is fused to a C-terminal His-tag (6xHis).

Endoglin, also known as CD105, is a Type I integral membrane glycoprotein with a large, disulfide-linked, extracellular region and a short, constitutively phosphorylated, cytoplasmic tail. Two splice variants of human endoglin, the S-endoglin and L-endoglin that differ in the length of their cytoplasmic tails have been identified. Endoglin is highly expressed on vascular endothelial cells, chondrocytes, and syncytiotrophoblasts of term placenta. It is also found on activated monocytes, bone marrow pro-erythroblasts, and leukemic cells of lymphoid and myeloid lineages. Human and mouse endoglin share approximately 70% and 97 % amino acid sequence identity in their extracellular and intracellular domains, respectively.

It has clearly been shown that CD105/Endoglin is required for angiogenesis and it plays a key role in heart development. Mutations in human endoglin or ALK-1 (another type I serine/threonine receptor) lead to the vascular disorder hereditary hemorrhagic telangiectasia (HHT). Mice heterozygous for endoglin have been developed as disease models for HHT. Endoglin has been shown to be a powerful marker of neovascularization. It is also useful as a functional marker that defines long-term repopulating hematopoietic stem cells.

**Host species:** Rabbits

Antigen: Recombinant mouse soluble CD105/Endoglin Purification: Protein-A Chromatography (+his tag depleted)

Stabilizer: none

**Buffer:** lyophilized from PBS, pH 7.4 w/o preservative

Formulation: lyophilized rabbit IgG

**Reconstitution:** The lyophilized IgG is stable at 4°C, for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile water/PBS to a concentration of >0.5 mg/ml the antibody is stable for at least six weeks at 2-4°C. **Avoid repeated freeze-thaw cycles.** 

Applications

ELISA: Use at 1-15 µg/ml.

Western Analysis: Use at a concentration of 1-2 μg/ml with the appropriate secondary reagents.

FACS analysis: Use at 3-20 µg/ml together with the appropriate secondary reagents

Immunohistochemistry: Not determined so far! Under work!

Optimal dilutions should be determined by each laboratory for each application.

Usage: Anti-mouse CD105/Endoglin is offered for research use. Not for drug use. Not for human use.

Catalogue number: 103-PA60 Size: 200 µg

Literature: [Carriera et al., Cancer Res 61:8079, 2001; Jackson DG Trends Cardiovasc Med 13:1, 2003; Sleeman et al., Microsc Res Tech 55:61, 2001; Mäkinen et al., EMBO J 20: 4762, 2001]

\*\* please note: always centrifuge vials before opening \*\*

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