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## Anti-human CD105/Endoglin

**Description:** Produced from sera of rabbits immunized with highly pure recombinant human soluble CD105/Endoglin produced in insect cells. The recombinant soluble CD105/Endoglin consists of amino acid 26 (Glu) to 586 (Leu) 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.

<b>Host species:</b>	Rabbits
<b>Antigen:</b>	Recombinant human soluble CD105/Endoglin
<b>Purification:</b>	Protein-A Chromatography (+his tag depleted)
<b>Stabilizer:</b>	none
<b>Buffer:</b>	lyophilized from PBS, pH 7.4 w/o preservative
<b>Formulation:</b>	lyophilized rabbit IgG

**Reconstitution:** The lyophilized IgG is stable at 4°C for at least six months and for greater than a year when kept at -20°C. When reconstituted in sterile water 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 and cell sorting:** Use at 2-5 µg/ml together with the appropriate secondary reagents.

**Immunohistochemistry:** Not investigated so far.

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

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

<b>Catalogue number:</b>	102-PA60S	<b>Size:</b>	100 µg
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Literature: [Cheifetz *et al.*, J Biol Chem 267:19027, 1992; Parker *et al.*, J Bone Miner Res 18:289, 2003; Barbara *et al.*, J Biol Chem 274:584, 1999; Arthur *et al.*, Dev Biol 217:42, 2000; McAllister *et al.*, Nature Genet 8:345, 1994; Fonsatti *et al.*, J Cell Physiol 188:1, 2001].

**\*\*Please note: always centrifuge product before opening vial!\*\***