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# **CD105 Polyclonal Antibody**

catalog number: AN007250L

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### Description

**Reactivity** Mouse

Immunogen Recombinant Mouse CD105 protein expressed by Mammalian

Host Rabbit Isotype IgG

**Purification** Antigen Affinity Purification

**Conjugation** Unconjugated

**Buffer** PBS with 0.05% Proclin 300, 1% protective protein and 50% glycerol, pH7.4

Applications Recommended Dilution

**WB** 1:500-1:1000

#### Data



Western blot with Anti CD105 Polyclonal antibody at dilution of 1:1000. Lane 1: Mouse lung tissue lysate.

Observed-MW:95-100 kDa Calculated-MW:71 kDa

# Preparation & Storage

Storage Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.

**Shipping** The product is shipped with ice pack, upon receipt, store it immediately at the

temperature recommended.

# Background

Endoglin (CD105) is a 90 kDa type I transmembrane glycoprotein of the zona pellucida (ZP) family of proteins. Endoglin and betaglycan/T beta RIII are type III receptors for TGF beta superfamily ligands, sharing 71% aa identity in the transmembrane (TM) and cytoplasmic domains. Endoglin is highly expressed on proliferating vascular endothelial cells, chondrocytes, and syncytiotrophoblasts of term placenta, with lower amounts on hematopoietic, mesenchymal and neural crest stem cells, activated monocytes, and lymphoid and myeloid leukemic cells. Human endoglin cDNA encodes 658 amino acids (aa) including a 25 aa signal sequence, a 561 aa extracellular domain (ECD) with an orphan domain and a two-part ZP domain, a TM domain and a 47 aa cytoplasmic domain. An isoform with a 14 aa cytoplasmic domain (S-endoglin) can oppose effects of long (I) endoglin. The human endoglin ECD shares 65-72% aa identity with mouse, rat, bovine, porcine and canine endoglin. Endoglin homodimers interact with TGF-beta 1 and TGF-beta 3 (but not TGF-beta 2), but only after binding T beta RII. Similarly, they interact with Activin A and BMP-7 via activin type IIA or B receptors, and with BMP-2 via BMPR-IA/AIK-3 or BMPR-IB/AIK-6. BMP-9, however, is reported to bind endoglin directly. Endoglin modifies ligand-induced signaling in multiple ways. For example, expression of endoglin can inhibit TGF-beta 1 signals but enhance BMP-7 signals in the same myoblast cell line.

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