

Endoglin/CD105 Polyclonal Antibody(Capture/Detector)

catalog number: AN000080P

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

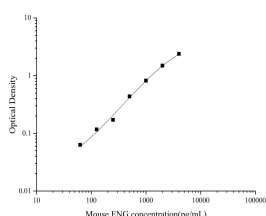
Description

Reactivity	Mouse
Immunogen	Recombinant Mouse Endoglin/CD105 protein expressed by Mammalian
Host	Rabbit
Isotype	Rabbit IgG
Purification	Antigen Affinity Purification
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

Applications Recommended Dilution

ELISA Capture	2-8 µg/mL
ELISA Detector	0.1-0.4 µg/mL

Data



Sandwich ELISA-Recombinant Mouse Endoglin/CD105 protein standard curve. Background subtracted standard curve using Endoglin/CD105 antibody(AN000080P) (Capture), Endoglin/CD105 antibody(AN000080P)(Detector) in sandwich ELISA. The reference range value for Recombinant Mouse Endoglin/CD105 protein is 62.5-4000 pg/mL.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

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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 (l) 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/ALK-3 or BMPR-IB/ALK-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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Rev. V1.7