

Mouse ENG Antibody Pair Set

Catalog No.	E-KAB-0120	Applications	ELISA
Synonyms	CD105, END, HHT1, ORW, ORW1		

Kit components & Storage

Title	Specifications	Storage
Mouse ENG Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Mouse ENG Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

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

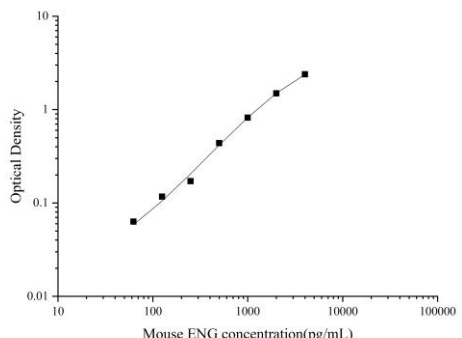
Product Information

Items		Characteristic (E-KAB-0120)	
		Mouse ENG Capture Antibody	Mouse ENG Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse ENG protein	Recombinant Mouse ENG protein
	Swissprot	Q63961	
Product details	Reactivity	Mouse	Mouse
	Host	Rabbit	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Antigen Affinity	Antigen Affinity
	Specificity	Detects Mouse ENG in ELISAs.	

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Applications

Mouse ENG Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4µg/mL	Mouse ENG Capture Antibody	
ELISA Detection	1:1000-1:10000	Mouse ENG Detection Antibody (Biotin)	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

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 (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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