

ENG Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21070a

Product Information

Application	WB, E
Primary Accession	<u>P17813</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51652
Calculated MW	70578

Additional Information

Gene ID	2022
Other Names	Endoglin, CD105, ENG, END
Target/Specificity	This ENG antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 284-318 amino acids from the Central region of human ENG.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ENG Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ENG
Synonyms	END
Function	Vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis (PubMed: <u>21737454</u> , PubMed: <u>23300529</u>). Required for normal structure and integrity of adult vasculature (PubMed: <u>7894484</u>). Regulates the migration of vascular endothelial cells (PubMed: <u>17540773</u>).

	Required for normal extraembryonic angiogenesis and for embryonic heart development (By similarity). May regulate endothelial cell shape changes in response to blood flow, which drive vascular remodeling and establishment of normal vascular morphology during angiogenesis (By similarity). May play a critical role in the binding of endothelial cells to integrins and/or other RGD receptors (PubMed:1692830). Acts as a TGF-beta coreceptor and is involved in the TGF-beta/BMP signaling cascade that ultimately leads to the activation of SMAD transcription factors (PubMed:21737454, PubMed:22347366, PubMed:23300529, PubMed:8370410). Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGFB1 signaling through SMAD3 (PubMed:21737454, PubMed:22347366, PubMed:21737454, PubMed:22347366, PubMed:213300529).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Detected on umbilical veil endothelial cells (PubMed:10625079). Detected in placenta (at protein level) (PubMed:1692830). Detected on endothelial cells (PubMed:1692830)

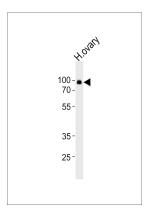
Background

Major glycoprotein of vascular endothelium. Involved in the regulation of angiogenesis. May play a critical role in the binding of endothelial cells to integrins and/or other RGD receptors. Acts as TGF-beta coreceptor and is involved in the TGF- beta/BMP signaling cascade. Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGF-beta1 signaling through SMAD3.

References

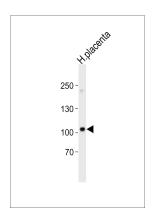
Bellon T.,et al.Eur. J. Immunol. 23:2340-2345(1993). Humphray S.J.,et al.Nature 429:369-374(2004). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Gougos A.,et al.J. Biol. Chem. 265:8361-8364(1990). McAllister K.A.,et al.Nat. Genet. 8:345-351(1994).

Images



Western blot analysis of lysate from human ovary tissue, using ENG Antibody (Center)(Cat. #AP21070a). AP21070a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

Western blot analysis of lysate from human placenta tissue, using ENG Antibody (Center)(Cat. #AP21070a). AP21070a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.