

ENG Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21070a

Specification

ENG Antibody (Center) - Product Information

Application WB,E
Primary Accession P17813
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 70578

ENG Antibody (Center) - 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

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.

ENG Antibody (Center) - Protein Information

Name ENG

Synonyms END

Function Vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis (PubMed: 21737454, PubMed: 23300529). Required for normal structure and integrity



of adult vasculature (PubMed:7894484). Regulates the migration of vascular endothelial cells (PubMed:17540773). 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:23300529).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

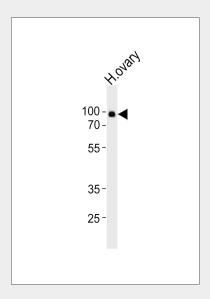
Detected on umbilical veil endothelial cells (PubMed:10625079). Detected in placenta (at protein level) (PubMed:1692830). Detected on endothelial cells (PubMed:1692830)

ENG Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

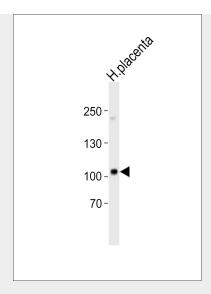
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ENG Antibody (Center) - 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.

ENG Antibody (Center) - 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.

ENG Antibody (Center) - 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).