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ENG Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11239c

Specification

ENG Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	P17813
Other Accession	NP_001108225.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**70578**
Antigen Region	**265-294**

ENG Antibody (Center) - Additional Information

Gene ID 2022

Other Names
Endoglin, CD105, ENG, END

Target/Specificity
This ENG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 265-294 amino acids from the Central region of human ENG.

Dilution
WB~~1:1000
FC~~1:10~50

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:8370410, PubMed:21737454, PubMed:22347366, PubMed:23300529). 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

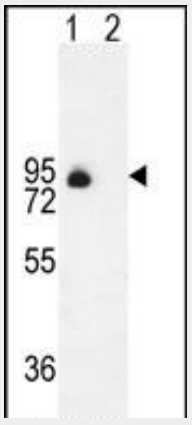
Tissue Location
Detected on umbilical veil endothelial cells (PubMed:10625079). Detected in placenta (at protein level) (PubMed:1692830). Detected on endothelial cells (PubMed:1692830)

ENG Antibody (Center) - Protocols

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

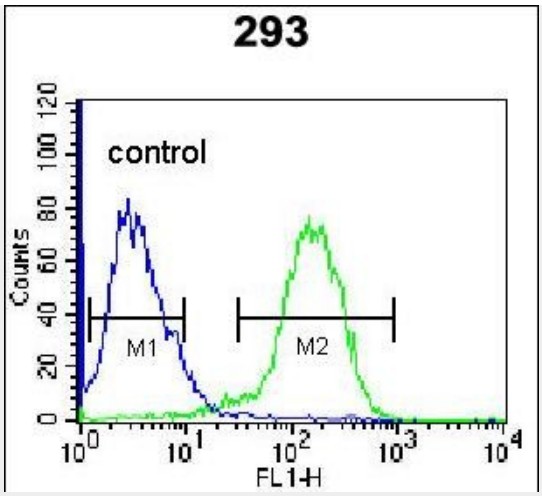
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ENG Antibody (Center) - Images



Western blot analysis of ENG (arrow) using rabbit polyclonal ENG Antibody (Center) (Cat. #AP11239c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ENG gene.

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ENG Antibody (Center) (Cat. #AP11239c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ENG Antibody (Center) - Background

This gene encodes a homodimeric transmembrane protein which is a major glycoprotein of the vascular endothelium. This protein is a component of the transforming growth factor beta receptor complex and it binds TGFB1 and TGFB3 with high affinity. Mutations in this gene cause hereditary hemorrhagic telangiectasia, also known as Osler-Rendu-Weber syndrome 1, an autosomal dominant multisystemic vascular dysplasia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

ENG Antibody (Center) - References

Lopez-Novoa, J.M., et al. Am. J. Physiol. Heart Circ. Physiol. 299 (4), H959-H974 (2010) :
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Zabaneh, D., et al. PLoS ONE 5 (8), E11961 (2010) :
Maynard, S.E., et al. Hypertens Pregnancy 29(3):330-341(2010)
Rius, C., et al. Blood 92(12):4677-4690(1998)