

**ENG Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP11239c**

## Specification

## ENG Antibody (Center) Blocking peptide - Product Information

Primary Accession [P17813](#)

### ENG Antibody (Center) Blocking peptide - Additional Information

**Gene ID 2022**

## Other Names

Endoglin, CD105, ENG, END

## Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

## Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

## Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## ENG Antibody (Center) Blocking peptide - Protein Information

**Name** ENG

**Synonyms** END

## Function

Vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/21737454" target="\_blank">21737454</a>, PubMed:<a href="http://www.uniprot.org/citations/23300529" target="\_blank">23300529</a>). Required for normal structure and integrity of adult vasculature (PubMed:<a href="http://www.uniprot.org/citations/7894484" target="\_blank">7894484</a>). Regulates the migration of vascular endothelial cells (PubMed:<a href="http://www.uniprot.org/citations/17540773" target="\_blank">17540773</a>). 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:<a href="http://www.uniprot.org/citations/1692830" target="\_blank">1692830</a>). 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:<a href="http://www.uniprot.org/citations/8370410" target="\_blank">8370410</a>, PubMed:<a href="http://www.uniprot.org/citations/21737454" target=" blank">21737454</a>, PubMed:<a

href="http://www.uniprot.org/citations/22347366" target="\_blank">22347366</a>, PubMed:<a href="http://www.uniprot.org/citations/23300529" target="\_blank">23300529</a>). Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGFB1 signaling through SMAD3 (PubMed:<a href="http://www.uniprot.org/citations/21737454" target="\_blank">21737454</a>, PubMed:<a href="http://www.uniprot.org/citations/22347366" target="\_blank">22347366</a>, PubMed:<a href="http://www.uniprot.org/citations/23300529" target="\_blank">23300529</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

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

### **ENG Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **ENG Antibody (Center) Blocking peptide - Images**

### **ENG Antibody (Center) Blocking peptide - 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) Blocking peptide - 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)