

**CD105 Antibody (Center E395) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP2880c****Specification**

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**CD105 Antibody (Center E395) Blocking Peptide - Product Information**Primary Accession [P17813](#)**CD105 Antibody (Center E395) Blocking Peptide - Additional Information****Gene ID** 2022**Other Names**

Endoglin, CD105, ENG, END

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2880c](/products/AP2880c) was selected from the Center region of human CD105. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**CD105 Antibody (Center E395) Blocking Peptide - Protein Information****Name** ENG**Synonyms** END**Function**

Vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis (PubMed: [21737454](http://www.uniprot.org/citations/21737454), PubMed: [23300529](http://www.uniprot.org/citations/23300529)). Required for normal structure and integrity of adult vasculature (PubMed: [7894484](http://www.uniprot.org/citations/7894484)). Regulates the migration of vascular endothelial cells (PubMed: [17540773](http://www.uniprot.org/citations/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:<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)

## **CD105 Antibody (Center E395) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **CD105 Antibody (Center E395) Blocking Peptide - Images**

## **CD105 Antibody (Center E395) Blocking Peptide - Background**

CD105 is 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 its gene cause hereditary hemorrhagic telangiectasia, also known as Osler-Rendu-Weber syndrome 1, an autosomal dominant multisystemic vascular dysplasia.

## **CD105 Antibody (Center E395) Blocking Peptide - References**

Chen,Y., Ann. Neurol. 66 (1), 19-27 (2009)Rius,C., Blood 92 (12), 4677-4690 (1998)