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CD105 Antibody (Center E395) Blocking Peptide

Synthetic peptide
Catalog # BP2880c

Specification

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 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

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)

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 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)

CD105 Antibody (Center E395) Blocking Peptide - Protocols

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

- Blocking Peptides