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ENG Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21070a

Specification

ENG Blocking Peptide (Center) - Product Information

Primary Accession P17813

ENG Blocking Peptide (Center) - Additional Information

Gene ID 2022

Other Names
Endoglin, CD105, ENG, END

Target/Specificity
The synthetic peptide sequence is selected from aa 284-298 of HUMAN ENG

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 Blocking Peptide (Center) - Protein Information

Name ENG

Synonyms END

Function
Vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis (PubMed:21737454,

ENG Blocking Peptide (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 Blocking Peptide (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).

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)

ENG Blocking Peptide (Center) - Protocols

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

- Blocking Peptides