



Rabbit Anti-CD105 antibody

SL0579R

Product Name CD105

Chinese Name CD105 抗体

Alias END; Endoglin; ENG; FLJ41744; HHT1; ORW; ORW1; Osler Rendu Weber syndrome 1; RP11 228B15.2; CD 105; CD105 antigen; EGLN_HUMAN; AI528660; AI662476; S-endoglin; SN6.

Research Area Tumour Cardiovascular Cell biology immunology Signal transduction Stem cells Growth factors and hormones The cell membrane 受体 Cell Surface Molecule endothelial cells

Immunogen Species Rabbit

Clonality Polyclonal

React Species Mouse

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 70kDa

Detection molecular weight 90kDa

Cellular localization The cell membrane

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human CD105: 601-658/658 <Cytoplasmic>

Lsotype IgG

Purification affinity purified by Protein A

Buffer Mouse 1M TBS(pH7.4) with 1% BSA, Mouse 3% Proclin300 and 50% Glycerol.



Solution

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

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 to the beta1 and beta3 peptides 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. This gene may also be involved in preeclampsia and several types of cancer. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013]

Function:

Major glycoprotein of vascular endothelium. May play a critical role in the binding of endothelial cells to integrins and/or other RGD receptors.

Subunit:

Homodimer that forms an heteromeric complex with the signaling receptors for transforming growth factor-beta: TGFBR1 and/or TGFBR2. It is able to bind TGF-beta 1, and 3 efficiently and TGF-beta 2 less efficiently. Interacts with TCTEX1D4. Interacts with ARRB2.

Product Detail

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Tissue Specificity:

Endoglin is restricted to endothelial cells in all tissues except bone marrow.

DISEASE:

Defects in ENG are the cause of hereditary hemorrhagic telangiectasia type 1 (HHT1) [MIM:187300]; also known as Osler-Rendu-Weber syndrome 1 (ORW1). HHT1 is an autosomal dominant multisystemic vascular dysplasia, characterized by recurrent epistaxis, muco-cutaneous telangiectases, gastro-intestinal hemorrhage, and pulmonary (PAVM), cerebral (CAVM) and hepatic arteriovenous malformations; all secondary manifestations of the underlying vascular dysplasia. Although the first symptom of HHT1 in children is generally nose bleed, there is an important clinical heterogeneity.

SWISS:

P17813

Gene ID:
2022

Database links:

[Entrez Gene: 2022](#) Mouse

[Omim: 131195](#) Mouse

[SwissProt: P17813](#) Mouse

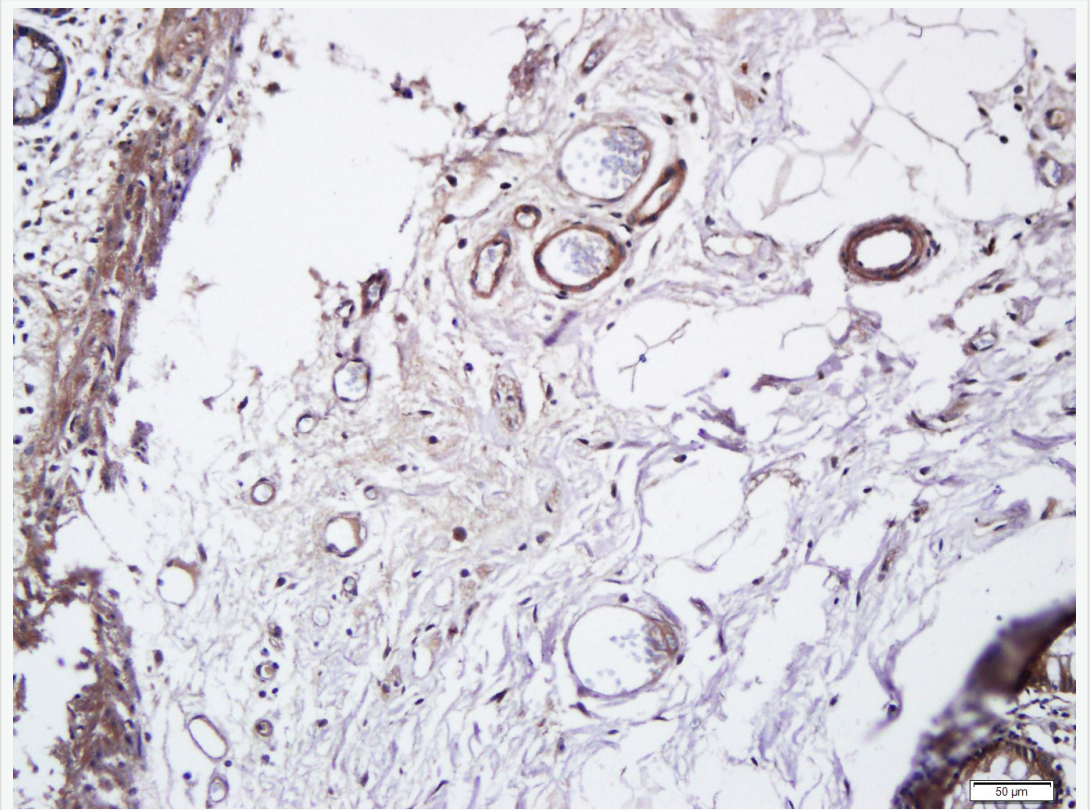
[Unigene: 76753](#) Mouse

The cell membrane 受体 (Membrane Receptors)

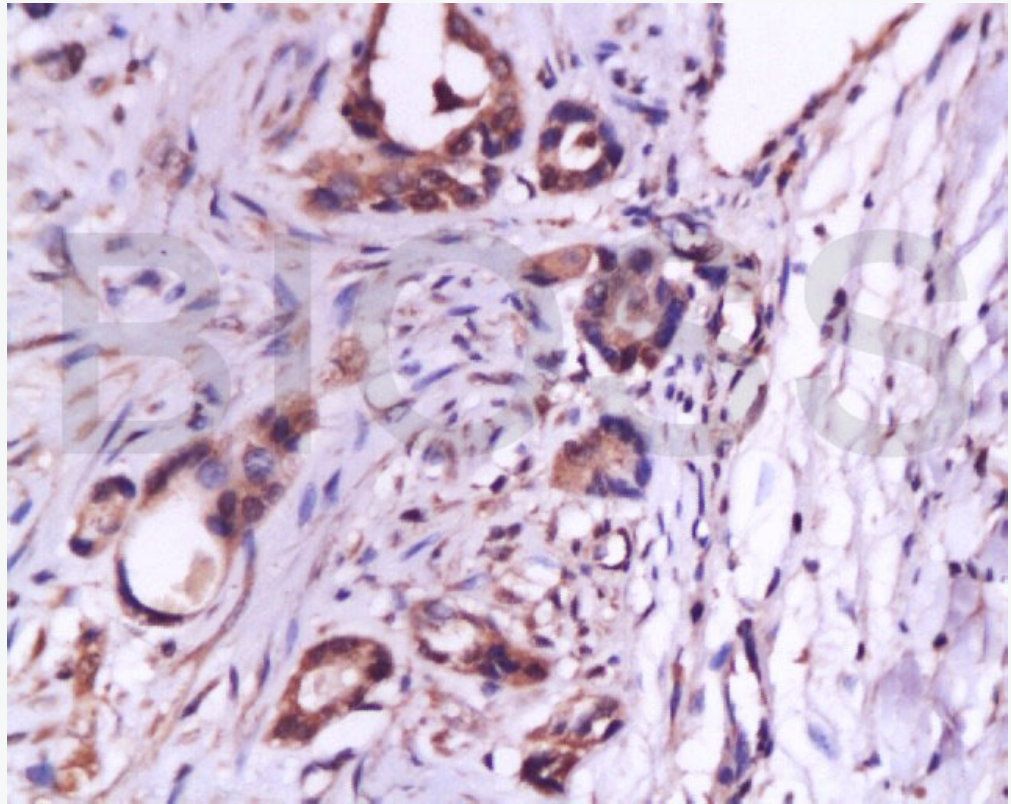
CD105 (Endoglin) : CD105 是一种存在于细胞表面的同源二聚体跨膜 glycoprotein, 是 TGF- β 受体复合物的组成部分, 是 TGF- β 的附属受体, 能与多种 TGF- β 超家族成员结合尤其与 TGF- β 1、TGF- β 3 有很高的亲和力, 调节 TGF- β 与其受体结合而参与信号传导, 是 endothelial cells 增殖相关膜抗原, 在培养的高增殖活性 endothelial cells 和许多恶性 Tumour 组织 vascular endothelial cell 中高表达, 参与血管生成, 但其在血管生成调节中的作用机制尚未阐明。主要用于各种恶性 Tumour 组织中的血管生成的研究。

CD105 (Endoglin) : CD105 是一种分子量为 180kDa 的存在于细胞表面的同源二聚体跨膜 glycoprotein, 是 TGF- β 受体复合物的组成部分, 是 TGF- β 的附属受体, 能与多种 TGF- β 超家族成员结合尤其与 TGF- β 1、TGF- β 3 有很高的亲和力, 调节 TGF- β s 与其受体结合而参与信号传导, 是 endothelial cells 增殖相关膜抗原, 在培养的高增殖活性 endothelial cells 和许多恶性 Tumour 组织 vascular endothelial cell 中高表达, 参与血管生成, 但其在血管生成调节中的作用机制尚未阐明。CD105 基因定位于人 9 号染色体, 是 I 型遗传性出血性毛细血管扩张症的相关基因。CD105 基因敲除小鼠胚胎因血管生成缺陷而于受精后平均 11.5 天死亡, 故有学者认为, CD105 可能与血管生成启动有关, 可用于标记 Tumour 新生血管。Endoglin 是 endothelial cells 表面与细胞增殖相关的膜抗原, 也是转化生长因子 β 超家族受体复合物成分之一。其具有调节 endothelial cells 对 TGF 的反应、促 endothelial cells 增殖和促血管形成等功能, 与 Tumour 血管的发生密切相关。近年来, Endoglin 在 Tumour 诊断、判断预后和疗效及抗 Tumour 血管靶向治疗等方面的作用得到重视。姬, 2017.1.15;

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (human cervix cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD105) Polyclonal Antibody, Unconjugated (SL0579R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

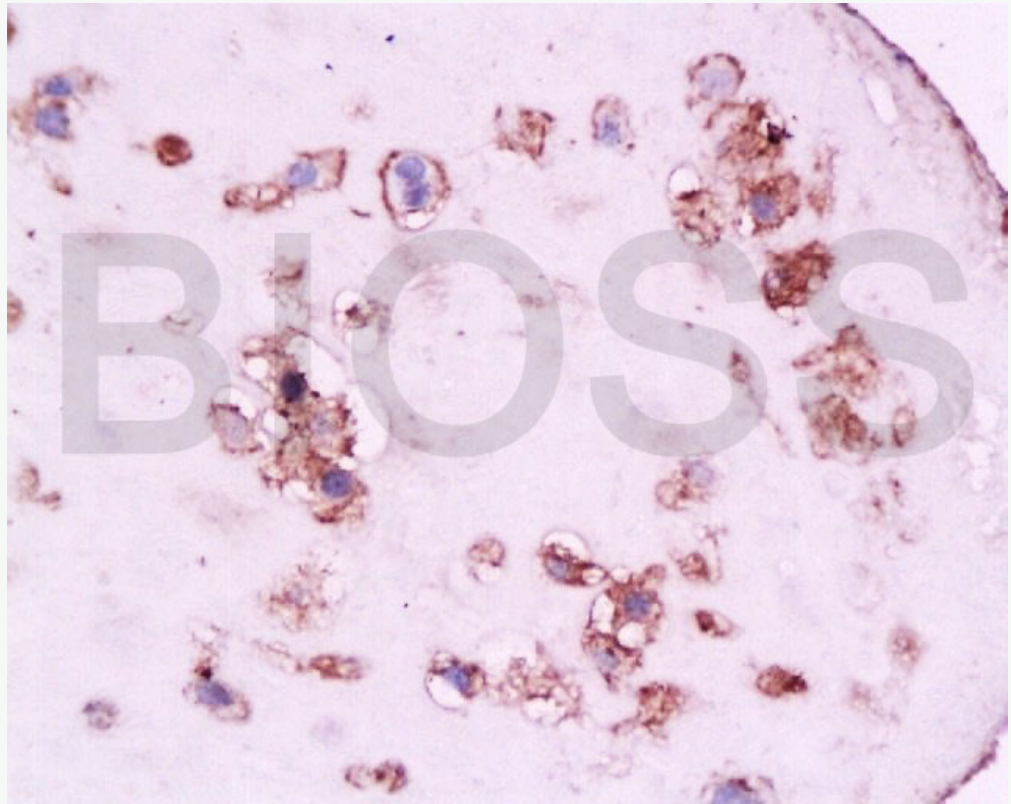


Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (Mouse1M, pH 6.0), Boiling bathing for 15min;

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CD105 Polyclonal Antibody, Unconjugated(SL0579R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

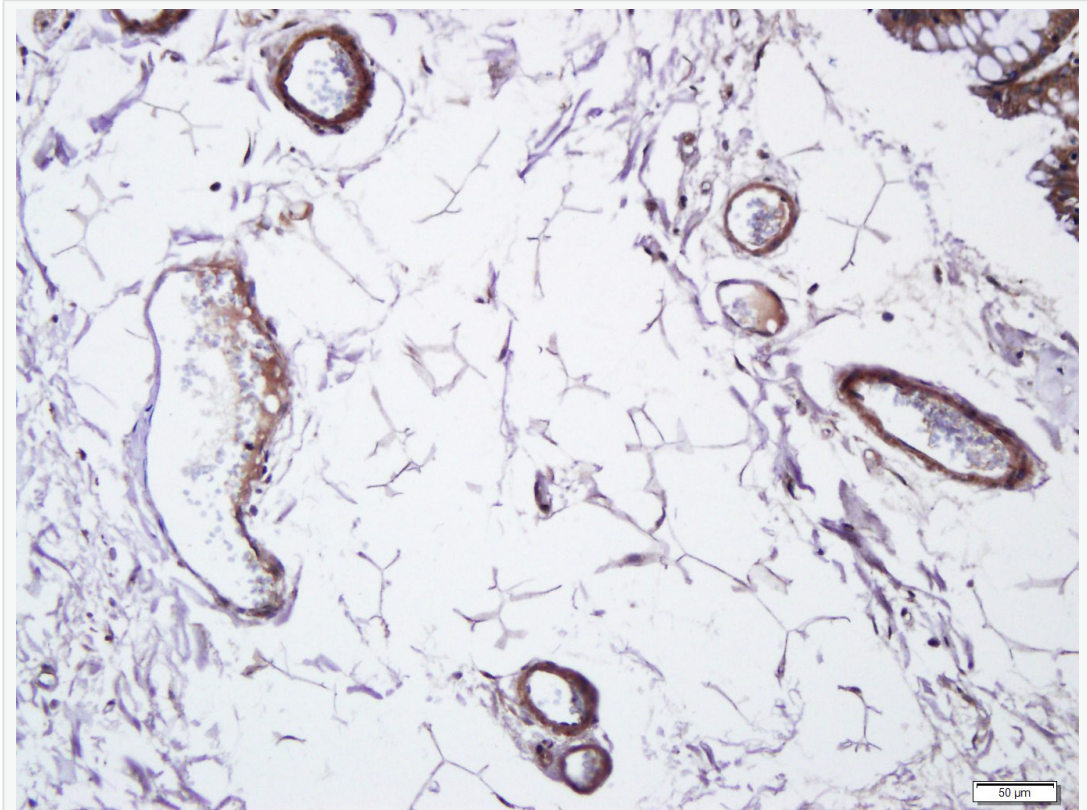


Tissue/cell: human placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

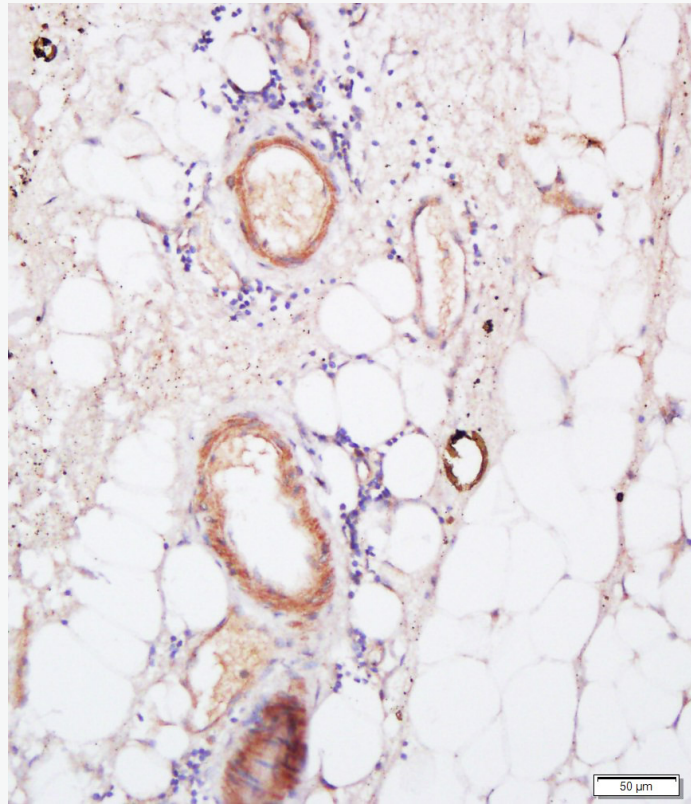
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Incubation: Anti-CD105 Polyclonal Antibody, Unconjugated(SL0579R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (human colon cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD105) Polyclonal Antibody, Unconjugated (SL0579R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human cervix cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD105) Polyclonal Antibody, Unconjugated (SL0579R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.