

**Anti-Endoglin / CD105 Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # AH13190****Specification**

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**Anti-Endoglin / CD105 Antibody - Product Information**

Application	WB, IF, FC
Primary Accession	<a href="#">P17813</a>
Other Accession	<a href="#">76753</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Calculated MW	70578

**Anti-Endoglin / CD105 Antibody - Additional Information****Gene ID** 2022**Other Names**

CD105; END; Endoglin; Eng; HHT1; S-endoglin

**Application Note**

WB~~1:1000  
IF~~1:50~200  
FC~~1:10~50

**Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Anti-Endoglin / CD105 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-Endoglin / CD105 Antibody - 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: [21737454](#)).

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/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>, PubMed:<a href="http://www.uniprot.org/citations/8370410" target="\_blank">8370410</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)

## Anti-Endoglin / CD105 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Endoglin / CD105 Antibody - Images



Western Blot of HeLa, A431 and HL-60 Cell Lysates with Endoglin / CD105 Monoclonal Antibody (ENG/1326).

## Anti-Endoglin / CD105 Antibody - Background

CD105/Endoglin is a Type I membrane glycoprotein located on cell surfaces and is part of the TGF-beta receptor complex. This protein has been found on endothelial cells, activated macrophages, fibroblasts, and smooth-muscle cells. Endoglin has a role in the development of the cardiovascular system and in vascular remodeling. Its expression is regulated during heart development. CD105 is highly expressed in endothelial cells during tumor angiogenesis and inflammation, with weak or negative expression in vascular endothelium of normal tissues. Angiogenesis is a promising prognostic marker in a variety of tumors. Endoglin is a more specific and sensitive marker for tumor angiogenesis than CD31 or CD34, as it labels only newly-formed blood vessels and may serve as a prognostic marker for Prostate Adenocarcinoma, and cancers of the lung, stomach, breast, and brain.