

**CD105 Antibody (clone 8A1)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS15977****Specification**

---

**CD105 Antibody (clone 8A1) - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">P17813</a>
Reactivity	Human, Mouse, Rat, Monkey, Dog
Host	Mouse
Clonality	Monoclonal
Calculated MW	71kDa KDa

**CD105 Antibody (clone 8A1) - Additional Information****Gene ID** 2022**Other Names**

Endoglin, CD105, ENG, END

**Target/Specificity**

Human CD105

**Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

**Precautions**

CD105 Antibody (clone 8A1) is for research use only and not for use in diagnostic or therapeutic procedures.

**CD105 Antibody (clone 8A1) - 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:

<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)

### Volume

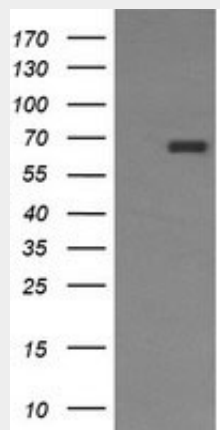
50 µl

## CD105 Antibody (clone 8A1) - Protocols

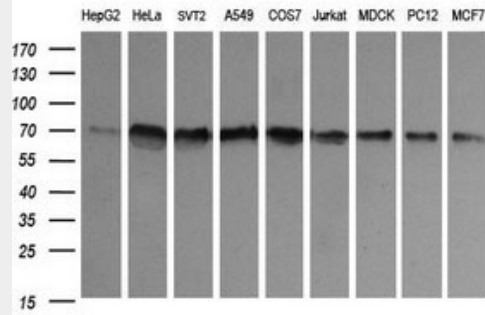
Provided below are standard protocols that you may find useful for product applications.

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

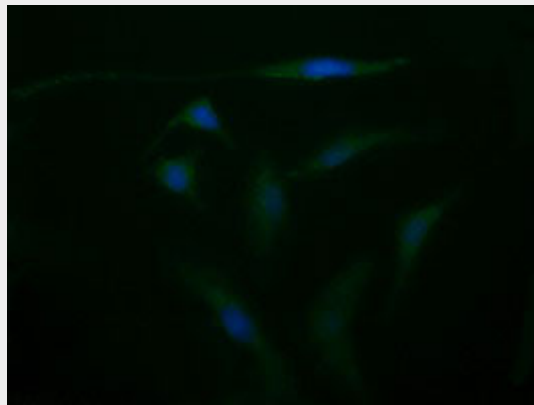
## CD105 Antibody (clone 8A1) - Images



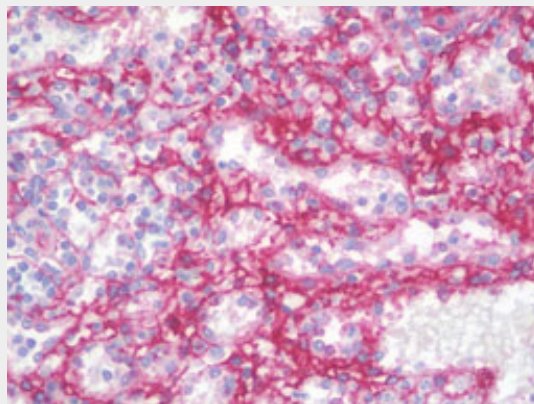
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ENG...



Western blot of extracts (35 ug) from 9 different cell lines by using anti-ENG monoclonal...



Immunofluorescent staining of HeLa cells using anti-ENG mouse monoclonal antibody.



Anti-CD105 antibody IHC staining of human spleen.

### **CD105 Antibody (clone 8A1) - 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.

### **CD105 Antibody (clone 8A1) - 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).