

**KD-Validated Anti-CD105 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1227****Specification****KD-Validated Anti-CD105 Rabbit Monoclonal Antibody - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB, ICC   |
| Primary Accession | <a href="#">P17813</a>  |
| Reactivity        | Human   |
| Clonality         | Monoclonal  |
| Isotype           | Rabbit IgG  |
| Calculated MW     | Predicted, 71 kDa , observed, 90 kDa KDa  |
| Gene Name         | ENG   |
| Aliases           | ENG; Endoglin; END; HHT1; CD105 Antigen; CD105; ORW1; Osler-Rendu-Weber Syndrome 1; Soluble Endoglin; ORW |
| Immunogen         | A synthesized peptide derived from human CD105  |

**KD-Validated Anti-CD105 Rabbit Monoclonal Antibody - Additional Information**

|                           |      |
|---------------------------|------|
| Gene ID                   | 2022 |
| <b>Other Names</b>        |      |
| Endoglin, CD105, ENG, END |      |

**KD-Validated Anti-CD105 Rabbit Monoclonal Antibody - Protein Information****Name** ENG**Synonyms** END**Function**

Vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/21737454" target="\_blank">21737454</a>, PubMed:<a href="http://www.uniprot.org/citations/23300529" target="\_blank">23300529</a>). Required for normal structure and integrity of adult vasculature (PubMed:<a 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/22347366" target="\_blank">22347366</a>, PubMed:<a href="http://www.uniprot.org/citations/22347366" target="\_blank">22347366</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

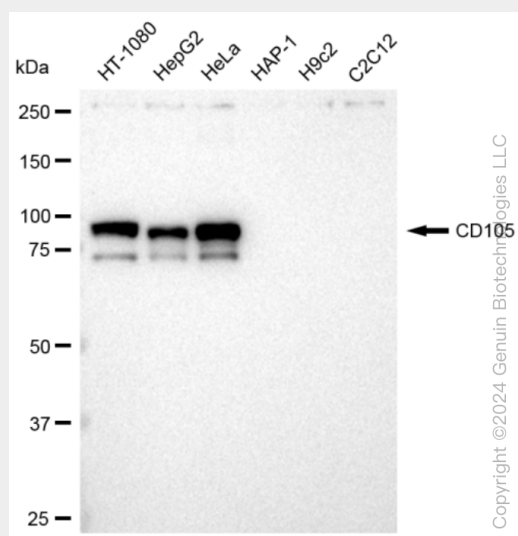
Detected on umbilical vein endothelial cells (PubMed:10625079). Detected in placenta (at protein level) (PubMed:1692830). Detected on endothelial cells (PubMed:1692830)

## KD-Validated Anti-CD105 Rabbit Monoclonal Antibody - Protocols

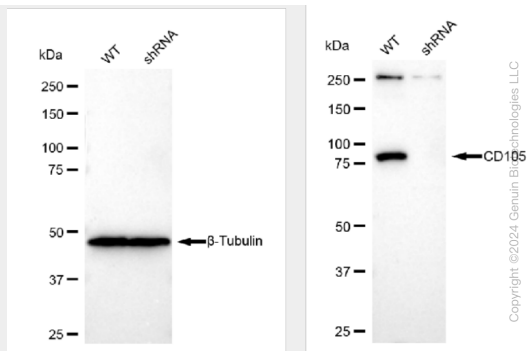
Provided below are standard protocols that you may find useful for product applications.

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

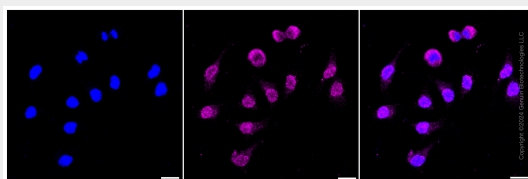
## KD-Validated Anti-CD105 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-CD105 antibody (Cat#AGI1227). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CD105 antibody (Cat#AGI1227, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-CD105 antibody (Cat#AGI1227). CD105 expression in wild type (WT) and CD105 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-CD105 antibody (Cat#AGI1227, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HeLa cells with CD105 antibody (Cat#AGI1227, 1:1,000). Nuclei were stained blue with DAPI; CD105 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.