

**Anti-CD105 Antibody**  
**Catalog # ABO10718****Specification**

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**Anti-CD105 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P17813</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Endoglin(ENG) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-CD105 Antibody - Additional Information**

**Gene ID** 2022

**Other Names**

Endoglin, CD105, ENG, END

**Calculated MW**

70578 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Membrane; Single-pass type I membrane protein.

**Tissue Specificity**

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

**Protein Name**

Endoglin

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human CD105(26-44aa ETVHCDLQPVGPERGEVY).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-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: [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: [1692830](http://www.uniprot.org/citations/1692830)). 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: [21737454](http://www.uniprot.org/citations/21737454), PubMed: [22347366](http://www.uniprot.org/citations/22347366), PubMed: [23300529](http://www.uniprot.org/citations/23300529), PubMed: [8370410](http://www.uniprot.org/citations/8370410)). Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGFB1 signaling through SMAD3 (PubMed: [21737454](http://www.uniprot.org/citations/21737454), PubMed: [22347366](http://www.uniprot.org/citations/22347366), PubMed: [23300529](http://www.uniprot.org/citations/23300529)).

**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)

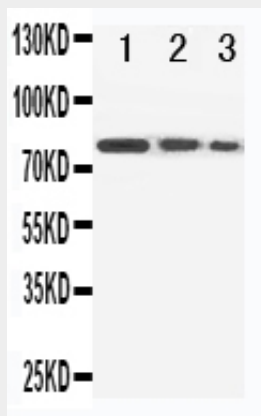
**Anti-CD105 Antibody - Protocols**

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

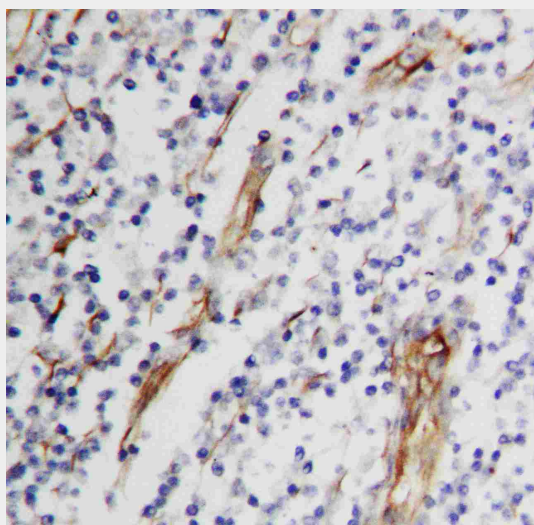
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-CD105 Antibody - Images



Anti-CD105 antibody, ABO10718, Western blotting  
Lane 1: Recombinant Human CD105 Protein 10ng  
Lane 2: Recombinant Human CD105 Protein 5ng  
Lane 3: Recombinant Human CD105 Protein 2.5ng



Anti-CD105 antibody, ABO10718, IHC(P)IHC(P): Human Mammary Cancer Tissue

## Anti-CD105 Antibody - Background

Endoglin (Osler-Rendu-Weber syndrome 1), CD105, is a type I membrane glycoprotein located on cell surfaces and is a part of the TGF beta receptor complex. Its gene is mapped to human chromosome 8. The protein consists of a homodimer of 180 kDa with disulfide links. It 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 and has been found to be elevated in pregnant women who subsequently develop preeclampsia.