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Anti-Endoglin / CD105 Antibody
Mouse Monoclonal Antibody
Catalog # AH13192

Specification

Anti-Endoglin / CD105 Antibody - Product Information

Application	**,1,3,4,**
Primary Accession	P17813
Other Accession	76753
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

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, PubMed:23300529). Required for normal structure and integrity of adult vasculature (PubMed:7894484). Regulates the migration of vascular endothelial cells (PubMed: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). 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, PubMed:22347366, PubMed:23300529, PubMed:8370410). Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGFB1 signaling through SMAD3 (PubMed:21737454, PubMed:22347366, PubMed:23300529).

Cellular Location
Cell membrane; Single-pass type I membrane protein

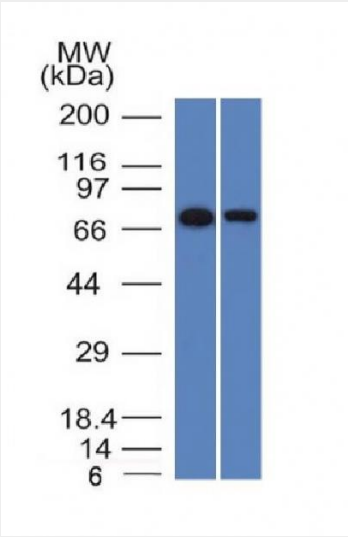
Tissue Location
Detected on umbilical veil endothelial cells (PubMed:10625079). Detected in placenta (at protein level) (PubMed:1692830). Detected on endothelial cells (PubMed:1692830)

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 Cytomety
- Cell Culture

Anti-Endoglin / CD105 Antibody - Images



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Western Blot of HeLa and A431 Cell Lysates with Endoglin / CD105 Monoclonal Antibody (ENG/1327).

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.