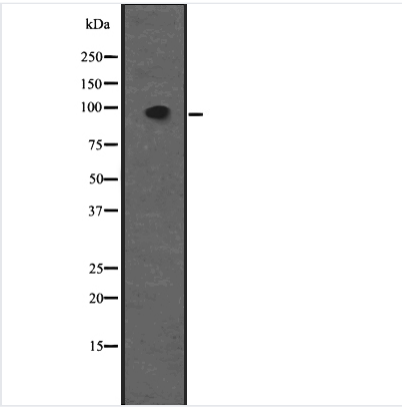
CD105 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CD105, Polyclonal Antibody
Full Product Name	CD105 Antibody
Product Gene Name	anti-CD105 antibody
Product Synonym Gene Name	ENG
Product Synonym Names	AI528660; AI662476; CD 105; CD105; CD105 antigen; EGLN_HUMAN; END; Endoglin; Eng; FLJ41744; HHT1; ORW; ORW1; Osler Rendu Weber syndrome 1; RP11 228B15.2; S-endoglin; SN6
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	CD105 antibody detects endogenous levels of total CD105
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	CD105 peptide (MBS9627026) is used for blocking the activity of CD105 antibody (MBS9608314)
Molecular Weight	Observed: 95 kDa Predicted: 71 kDa
3D Structure	ModBase 3D Structure for P17813
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human CD105
Subcellular Location	Membrane.
Tissue Specificity	Detected on umbilical veil endothelial cells (PubMed:10625079). Detected in placenta (at protein level) (PubMed:1692830). Detected on endothelial cells (PubMed:1692830).
Predicted Cross Reactivity	**Pig, Horse, Sheep, Dog**
Similarity	Pig (90%), Horse (90%), Sheep (90%), Dog (80%)
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CD105 antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-CD105 antibody	WB: 1:1000-3000

Related Product Information for anti-CD105 antibody	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 play a critical role in the binding of endothelial cells to integrins and/or other RGD receptors (PubMed:1692830). Acts as TGF-beta coreceptor and is involved in the TGF-beta/BMP signaling cascade that ultimately leads to the activation of SMAD transcription factors (PubMed:8370410, PubMed:21737454, PubMed:22347366, PubMed:23300529). Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGFB1 signaling through SMAD3 (PubMed:21737454, PubMed:22347366, PubMed:23300529). Subunit Structure: Homodimer; disulfide-linked (PubMed:8370410, PubMed:1326540, PubMed:21737454, PubMed:22347366, PubMed:28564608). Forms a heteromeric complex with the signaling receptors for transforming growth factor-beta: TGFBR1 and/or TGFBR2 (PubMed:1326540). It is able to bind TGFB1 and TGFB2 with high affinity, but not TGFB3 (PubMed:8370410, PubMed:1326540). Interacts with GDF2, forming a heterotetramer with a 2:2 stoichiometry (PubMed:21737454, PubMed:22347366, PubMed:28564608). Interacts with ACVRL1 (PubMed:22347366, PubMed:28564608). Can form a heteromeric complex with GDF2 and ACVRL1 (PubMed:28564608). Interacts with BMP10 (PubMed:21737454). Interacts with TCTEX1D4 (PubMed:16982625). Interacts with ARRB2 (PubMed:17540773). Similarity: The ZP domain mediates dimerization.The N-terminal OR region is composed of two intertwined domains (OR1 and OR2) with a common, novel fold. Each contains 12 beta-strands that form a parallel beta-helix-like structure, plus a single alpha-helix. The OR1 region mediates interaction with GDF2.
Other Notes	Small volumes of anti-CD105 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CD105 purchase	MBS9608314 is an antibody targeting CD105. Also known as CD105 Antibody. Reactive in Human, Mouse. Host: Rabbit.



Western Blot (WB) of anti-CD105 antibody
Western blot analysis of CD105 using LOVO whole lysates.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD105. It may not necessarily be applicable to this product.

NCBI GI #	4557555
NCBI GeneID	2022
NCBI Accession #	NP_000109.1
UniProt Primary Accession #	P17813
UniProt Secondary Accession #	Q14248; Q14926; Q5T9C0
UniProt Related Accession #	P17813
GenBank Nucleotide #	NM_000118.3
NCBI Official Full Name	endoglin isoform 2
NCBI Official Synonym Full Names	endoglin

NCBI Official Symbol	ENG
NCBI Official Synonym Symbols	END; HHT1; ORW1
UniProt Protein Name	Endoglin
UniProt Synonym Protein Names	CD_antigen: CD105
Protein Family	Endoglin
UniProt Gene Name	ENG
UniProt Synonym Gene Names	END
NCBI Protein Information	endoglin
NCBI Summary for CD105	This gene encodes a homodimeric transmembrane protein which is a major glycoprotein of the vascular endothelium. This protein is a component of the transforming growth factor beta receptor complex and it binds to the beta1 and beta3 peptides with high affinity. Mutations in this gene cause hereditary hemorrhagic telangiectasia, also known as Osler-Rendu-Weber syndrome 1, an autosomal dominant multisystemic vascular dysplasia. This gene may also be involved in preeclampsia and several types of cancer. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2013]
UniProt Comments for CD105	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 (). May regulate endothelial cell shape changes in response to blood flow, which drive vascular remodeling and establishment of normal vascular morphology during angiogenesis (). May play a critical role in the binding of endothelial cells to integrins and/or other RGD receptors (PubMed:1692830). Acts as TGF-beta coreceptor and is involved in the TGF-beta/BMP signaling cascade that ultimately leads to the activation of SMAD transcription factors (PubMed:8370410, PubMed:21737454, PubMed:22347366, PubMed:23300529). Required for GDF2/BMP9 signaling through SMAD1 in endothelial cells and modulates TGFB1 signaling through SMAD3 (PubMed:21737454, PubMed:22347366, PubMed:23300529).
Research Articles on CD105	**1.** ENG mutation carriers were more likely than ACVRL1 mutation carriers to have pAVMs (P < 0.001) or multiple lesions (P = 0.03), and to undergo procedural intervention (P = 0.02). The HHT severity score was significantly higher in ENG than in ACVRL1 (P = 0.02).
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/cd105/9608314