

Datasheet for ABIN7320288

Endoglin Protein (ENG) (His tag)**1** Image[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Endoglin (ENG)
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Endoglin protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse Endoglin/CD105 Protein (His Tag)(Active)
Sequence:	Met 1-Gly 580
Characteristics:	A DNA sequence encoding the mouse CD105 (NP_031958.2) extracellular domain (Met 1-Gly 580) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 97 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	1. Measured by its ability to bind Human ENG-Fc in functional Elisa.2. Measured by its ability to latent TGFB1-His in functional Elisa.3. Measured by its ability to mouse ENG-His in functional Elisa.4. Measured by its ability to inhibit BMP9-induced alkaline phosphatase production by MC3T3E1 mouse chondrogenic cells. David, L. et al. (2007) Blood 109:1953. The ED50 for this effect is typically 5-15 ng/mL in the presence of 2 ng/mL of recombinant human BMP9.

Target Details

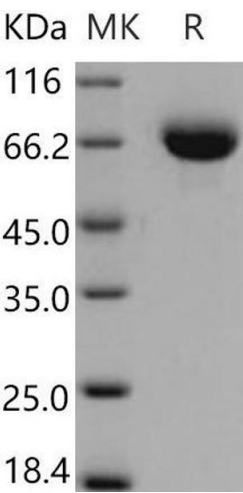
Target:	Endoglin (ENG)
Alternative Name:	Endoglin/CD105 (ENG Products)
Background:	<p>Background: Endoglin, also known as CD105, is a type I homodimeric transmembrane glycoprotein with a large, disulfide-linked, extracellular region and a short, constitutively phosphorylated cytoplasmic tail. Endoglin contains an RGD tripeptide which is a key recognition structure in cellular adhesion, suggesting a critical role for endoglin in the binding of endothelial cells to integrins and/or other RGD receptors. Endoglin is highly expressed on vascular endothelial cells, chondrocytes, and syncytiotrophoblasts of term placenta. It is also found on activated monocytes, mesenchymal stem cells and leukemic cells of lymphoid and myeloid lineages. As an accessory receptor for the TGF-β superfamily ligands, endoglin binds TGF-β1 and TGF-β3 with high affinity not by itself but by associating with TGF-β type II receptor (TβRII) and activates the downstream signal pathways. In addition, in human umbilical vein endothelial cells, ALK-1 is also a receptor kinase for endoglin threonine phosphorylation, and mutations in either of the two genes result in the autosomal-dominant vascular dysplasia, hereditary hemorrhagic telangiectasia (HHT). Endoglin has been regarded as a powerful biomarker of neovascularization, and is associated with several solid tumor types.</p> <p>Synonym: AI528660;AI662476;CD105;Endo;S-endoglin</p>
Molecular Weight:	61.2 kDa
NCBI Accession:	NP_031958

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	<p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>



Western Blotting

Image 1.