

Endoglin/CD105 Active Protein | ENG active protein

Endoglin/CD105 Protein, Mouse, Recombinant (His Tag)

CATALOG #
AAA258161

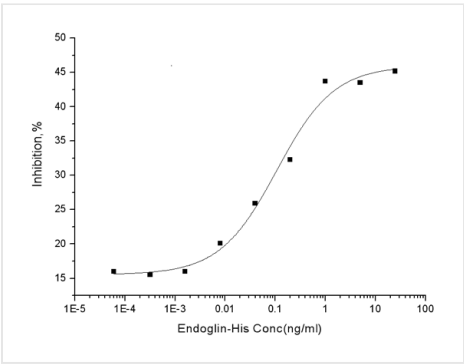
HOST
HEK293 Cells

PRODUCT SYNONYMS

Endoglin/CD105; Endoglin/CD105 Protein; Mouse; Recombinant (His Tag); Mouse Endoglin/CD105/ENG Protein (His Tag); AI528660 Protein; AI662476 Protein; CD105 Protein; Endo Protein; S-endoglin Protein; endoglin; ENG active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>97% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Gly58 0
Species	Mouse
Activity	1. Measured by its ability to inhibit BMP9-induced alkaline phosphatase production by MC3T3E1 mouse chondrogenic cells. The ED50 for this effect is typically 25-100ng/mL in the presence of 2ng/mL of recombinant human BMP9.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Arg 27
Tag	C-His
Protein Construction	A DNA sequence encoding the mouse CD105 (NP_031958.2) extracellular domain (Met 1-Gly 580) was expressed, with a C-terminal polyhistidine tag.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data
Measured by its ability to inhibit BMP9-induced alkaline phosphatase production by MC3T3E1 mouse chondrogenic cells. The ED50 for this effect is typically 25-100 ng/mL in the presence of 2 ng/mL of recombinant human BMP9.

ADDITIONAL INFORMATION

Related Product Information for ENG active protein	Background: Endoglin, also known as CD15, 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-beta superfamily ligands, endoglin binds TGF-beta1 and TGF-beta3 with high affinity not by itself but by associating with TGF-beta type II receptor (TbetaRII) 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.
Product Categories/Family for ENG active protein	Hemangioblast Markers Cancer Drug Targets
References	Bellon T., et al.,(1993), Identification and expression of two forms of the human transforming growth factor-beta-binding protein endoglin with distinct cytoplasmic regions. Eur. J. Immunol. 23:2340-2345.Humphray S.J., et al., (2004), DNA sequence and analysis of human chromosome 9.Nature 429:369-374.Gougos A., et al.,(1990), Primary structure of endoglin, an RGD-containing glycoprotein of human endothelial cells.J. Biol. Chem. 265:8361-8364.

NCBI AND UNIPROT INFORMATION

Molecular Weight	The secreted recombinant mouse CD105 consists of 565 amino acids and has a calculated molecular mass of 61.2kDa. As a result of glycosylation, the apparent molecular mass of the recombinant protein is approximately 65-70kDa in SDS-PAGE under reducing cond
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.