

# Human Endoglin/CD105 Protein

Cat. No. EDG-HM401

## Description

<b>Source</b>	Recombinant Human Endoglin/CD105 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Glu26-Gly586.
<b>Accession</b>	P17813-1
<b>Molecular Weight</b>	The protein has a predicted MW of 63.7 kDa. Due to glycosylation, the protein migrates to 70-82 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

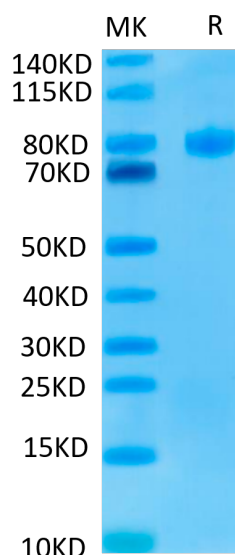
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Endoglin (CD105) is a 90 kDa type I transmembrane glycoprotein of the zona pellucida (ZP) family of proteins. Endoglin is a vascular endothelium glycoprotein that plays an important role in the regulation of angiogenesis. Required for normal structure and integrity of adult vasculature (PubMed:7894484). Regulates the migration of vascular endothelial cells. 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.

## Assay Data

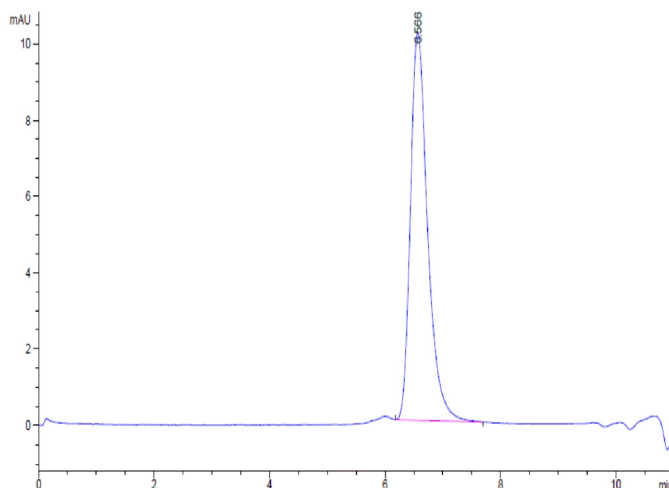
### Bis-Tris PAGE



Human Endoglin on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

### SEC-HPLC

Assay Data

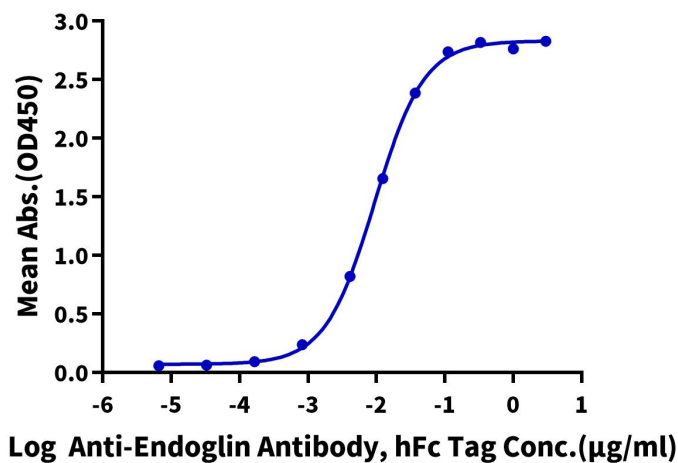


The purity of Human Endoglin is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human Endoglin, His Tag ELISA**

0.5µg Human Endoglin, His Tag Per Well



Immobilized Human Endoglin, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Anti-Endoglin Antibody, hFc Tag with the EC50 of 9.4ng/ml determined by ELISA.