Recombinant Mouse Endoglin/CD105 protein (His Tag)

Catalog Number: PDMM100215



Description			
Species	Mouse		
Source	HEK293 Cells-derived Mouse Endoglin protein Met1-Lys580, with an C-terminal His		
Mol_Mass	63.7 kDa		
Accession	Q63961		
Bio-activity	Not validated for activity		
Properties			
Purity	> 95% as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method		
Storage	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 $< -20^{\circ}$ C for 3 months.		
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.		
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%		
	Mannitol.		
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of		
	0.5 mg/mL. Concentration is measured by UV-Vis.		
Data			

Note: Centrifuge before opening to ensure complete recovery of vial contents.

KDa	Μ	R
80 60	11	-
40	-	
30	-	
20		
12		
	-	

> 95 % as determined by reducing SDS-PAGE.

## Background

Endoglin, also known as CD105, is a type I&nbsp, homodimeric transmembrane glycoprotein with a large, disulfidelinked, 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- $\beta$ 1 and TGF- $\beta$ 3 with high affinity not by itself but by associating with TGF- $\beta$  type I&nbsp,I receptor (T $\beta$ RII) 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.

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