Recombinant Mouse Podoplanin/PDPN Protein (His &Fc Tag)

Catalog Number: PKSM040777

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

Description	
Species	Mouse
Source	HEK293 Cells-derived Mouse Podoplanin/PDPN protein Met 1-Leu 141, with an C-
	terminal His & Fc
Calculated MW	40.6 kDa
Observed MW	60-65 kDa
Accession	NP_034459.2
Bio-activity	Immobilized mouse PDPN-Fch at 10 µg/ml (100 µl/well) can bind biotinylated human
	CLEC1B-His, The EC ₅₀ of biotinylated human CLEC1B-His is 0.04-0.08 μ g/ml.
Properties	
Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	
	KDa MK R
	116
	66.2
	45.0
	35.0
	25.0

> 97 % as determined by reducing SDS-PAGE.

18.4 14.4

Background

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Podoplanin, also known as PDPN, is a type-I integral membrane glycoprotein with diverse distribution in human tissues. The physiological function of this protein may be related to its mucin-type character. The homologous protein in other species has been described as a differentiation antigen and influenza-virus receptor. The specific function of this protein has not been determined. Alternatively spliced transcript variants encoding different isoforms have been identified.PDPN is a mucin-type glycoprotein negatively charged by extensive O-glycosylation and a high content of sialic acid, which expresses the adhesive property. It is selectively expressed in lymphatic endothelium as well as lymphangiomas, Kaposi sarcomas, and in a subset of angiosarcomas with probable lymphatic differentiation. PDPN may contribute to form odontoblastic fiber or function as the anchorage to the tooth development and in proliferating epithelial cells of cervical loop and apical bud. The intensity of podoplanin expression is negatively correlated with the expression of CD34 and factor VIII. Podoplanin would be useful as a diagnostic marker for epithelioid hemangioendothelioma in liver tumors.