



Recombinant Protein Technical Manual

Recombinant Human Podoplanin/PDPN Protein (His & Fc Tag)(Active)
RPES4011

Product Data:

Product SKU: RPES4011

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q86YL7

Protein Information:

Molecular Mass: 38.6 kDa

AP Molecular Mass: 50-55 kDa

Tag: C-His & Fc

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human Podoplanin at 10 µg/mL (100 µl/well) can bind biotinylated human CLEC1B-His, The EC50 of biotinylated human CLEC1B-His is 0.4.0 µg/mL.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Podoplanin; Aggrus; Glycoprotein 36; Gp36; PA2.26 Antigen; T1-Alpha; T1A; PDPN; GP36

Immunogen Information:

Sequence: Met 1-Lys 123

Background:

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.