For Research Use Only

Recombinant Human Podoplanin protein (rFc Tag)(HPLC verified)



Catalog Number: Eg5024

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE
> >90 %, SDS-PAGE
 SEC-HPLC

Technical Specifications

>90 %, SDS-PAGE
 >90 %, SEC-HPLC

Endotoxin Level:

<0.1 EU/µg protein, LAL method

HEK293-derived Human Podoplanin protein Ala23-Leu131 (Accession# Q86YL7-1) with a rabbit IgG Fc tag at the C-terminus.

GeneID: 10630

Accession: Q86YL7-1

Predicted Molecular Mass:

37.4 kDa SDS-PAGE

48-68 kDa, reducing (R) conditions

Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Until expiry date, -20°C to -80°C as lyophilized proteins. 3 months, -20°C to -80°C under sterile conditions after reconstitution.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Podoplanin (PDPN) is a transmembrane glycoprotein that plays a role in a variety of biological processes including regulation of blood-lymphatic vessel development, cerebral vascular pattern and integrity, cell motility, tumorigenesis and metastasis, and mediates tumor cell-induced platelet aggregation in different cancer types. It is a lymphatic marker because the expression of podoplanin has been detected in lymphatic but not blood vascular endothelium, and is useful as the marker of tumor-associated Lymphangiogenesis. When expressed in keratinocytes, PDPN induces changes in cell morphology with transfected cells showing an along to the partie of the action cytokeleton. an elongated shape, numerous membrane protrusions, major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion.

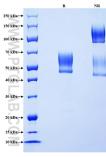
References

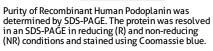
1. Ukaji T, et al. Cancer Sci. 2021; 112(6):2299-2313. 2. Krishnan H, et al. J Biol Chem. 2013; 288(17):12215-21. 3. Wang X, et al. Cancer Gene Ther. 2023; 30(2):345-357. 4.Astarita JL, et al. Front Immunol. 2012; 3:283.

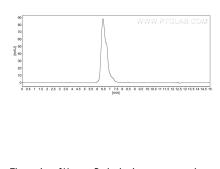
Synonyms

PDPN, 29kDa cytosolic podoplanin intracellular domain, Aggrus, PA2.26 antigen, PSEC0003

Selected Validation Data







The purity of Human Podoplanin was greater than 90% as determined by SEC-HPLC.