

Podoplanin, soluble Recombinant Protein | PDPN recombinant protein

Human Podoplanin, soluble

CATALOG # AAA79136	HOST E Coli	REACTIVITY Human
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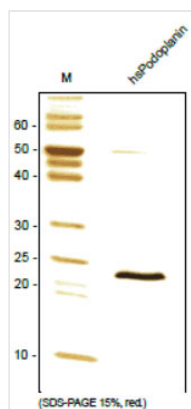
PRODUCT SYNONYMS

Podoplanin; soluble; Human Podoplanin; Recombinant Human soluble Podoplanin; GP36; Glycoprotein 36; Aggrus; T1-alpha; PDPN recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 95% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	GSSHHHHHS SGLVPRGSHM EGASTGQPED DTETTGLEGV AMPGAEDDVV TPGTSEDTRYK SGLTTLVATS VNSVTGIRIE DLPTSESTVH AQEQSPSATA SNVATSHSTE KVDGDTQTTV EKDGLST
Sequence Length	127
N Terminal Sequence	GSHMEGASTGQ
Buffer	PBS
Length (aa)	127
Stabilizer	None
Reconstitution	We recommend a quick spin followed by reconstitution in water to a concentration of 0.1 - 1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.
Preparation and Storage	The lyophilized protein is stable for a few weeks at room temperature, but best stored at -20 degree C. Reconstituted sPodoplanin should be stored in working aliquots at -20 degree C.

IMAGES



Application Data

SDS-PAGE analysis of recombinant human soluble Podoplanin. Sample was loaded in 15% SDS-polyacrylamide gel under reducing conditions and stained with Silver stain.

ADDITIONAL INFORMATION

Related Product Information for PDPN recombinant protein	Podoplanin, also known as glycoprotein 36 (gp36), PA2.26 antigen, T1-alpha (T1A), and aggrus, is a 36 kDa type I transmembrane sialoglycoprotein and member of the Podoplanin family. Podoplanin has three potential splice variants, the longest of which is represented by a 238 amino acid precursor (NP_006465). It contains an undefined signal sequence, a 22 aa transmembrane segment (aa 207-228) and a short cytoplasmic tail (aa 229-238). The ECD contains abundant Ser/Thr residues that could serve as potential O-linked glycosylation sites. The cytoplasmic tail contains putative sites for protein kinase C phosphorylation. There are two potential alternate start sites at Met 77 (Swiss Prot #: Q86YL7) and Met 119 (EAW51692) that generate short forms. The 162 aa short form Podoplanin precursor shares 47% aa identity with mouse Podoplanin. Podoplanin is expressed on glomerular epithelial cells (podocytes), type I lung alveolar cells, lymphatic endothelial cells, and numerous tumors, including colorectal tumors, squamous cell carcinomas, testicular seminoma, and brain tumors. One study shows high expression of Podoplanin mRNA in placenta, lung, skeletal muscle, and heart, and weaker levels in brain, kidney, and liver. Podoplanin is the ligand for C-type lectin-like receptor 2 (CLEC-2). Their association is dependent on sialic acid on O-glycans of Podoplanin. Through its association with CLEC-2, Podoplanin induces platelet aggregation and tumor metastasis. Podoplanin is also necessary for lymphatic vessel formation, normal lung cell proliferation and alveolus formation at birth. The recombinant soluble Podoplanin starts with GLST and ends with GLST.
Product Categories/Family for PDPN recombinant protein	Soluble receptors
References	1. Breiteneder-Geleff et al, Am J Pathol 154:385, 1999 2. Kerjaschki et al, Nature Med 12:230, 2006 3. Kriehuber et al, J Exp Med 194:797, 2001 4. Zimmer. et al, Biochem J 341:277, 1999 5. Kato et al, Tumour Biol 26:195, 2005 6. Katsue-Inoue et al, J Biol Chem 282:25993, 2007 7. Kato et al, Oncogene 23:8552, 2004 8. Schacht. et al, Am J Pathol 166:913, 2005 9. Mishima et al, Acta Neuropathol 111:483, 2006

NCBI AND UNIPROT INFORMATION

NCBI GI #	54792060
NCBI GeneID	10630
NCBI Accession #	NP_001006625.1
NCBI GenBank Nucleotide #	NM_001006624.1
UniProt Accession #	Q86YL7 ; O60836 ; O95128 ; Q7L375 ; Q8NBQ8 ; Q8NBR3 ; A9Z1Y2 ; B2R6J8 ; E9PB68 ; F6QWX5
Molecular Weight	13,1 kDa
NCBI Official Full Name	podoplanin isoform c
NCBI Official Synonym Full Names	podoplanin
NCBI Official Symbol	PDPN
NCBI Official Synonym Symbols	T1A; GP36; GP40; Gp38; OTS8; T1A2; T11A; T1A-2; AGGRUS; HT1A-1; PA2.26
NCBI Protein Information	podoplanin; T1-alpha; hT1alpha-1; hT1alpha-2; PA2.26 antigen; glycoprotein 36; glycoprotein, 36-KD; lung type I cell membrane associated glycoprotein; lung type-I cell membrane-associated glycoprotein (T1A-2)
UniProt Protein Name	Podoplanin
UniProt Gene Name	PDPN
UniProt Synonym Gene Names	GP36; Gp36; T1A
UniProt Entry Name	PDPN_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.