

## Podoplanin-FC recombinant protein

Catalog No: YD3002

**Reactivity:** Human;

Purity: >90% as determined by SDS-PAGE

Gene Name: PDPN

**Protein Name:** Podoplanin (Aggrus) (Glycoprotein 36) (Gp36) (PA2.26 antigen) (T1-alpha)

(T1A) [Cleaved into: 29kDa cytosolic podoplanin intracellular domain (PICD)]

**Sequence:** Amino acid:23-131, with FC tag.

Q86YL7

Human Gene Id: 10630

**Human Swiss Prot** 

No:

Formulation: Phosphate-buffered solution

Source: Mammalian cells

Storage Stability: -15°C to -25°C/1 year(Avoid freeze / thaw cycles)

**Function :** Mediates effects on cell migration and adhesion through its different partners.

During development plays a role in blood and lymphatic vessels separation by binding CLEC1B, triggering CLEC1B activation in platelets and leading to platelet

activation and/or aggregation (PubMed:14522983, PubMed:15231832,

PubMed:17222411, PubMed:17616532, PubMed:18215137). Interaction with CD9, on the contrary, attenuates platelet aggregation induced by PDPN (PubMed:18541721). Through MSN or EZR interaction promotes epithelial-mesenchymal transition (EMT) leading to ERZ phosphorylation and triggering

RHOA activation leading to cell migration increase and invasiveness

(PubMed:17046996, PubMed:21376833). Interaction with CD44 promotes directional cell migration in epithelial and tumor cells (PubMed:20962267). In lymph nodes (LNs), controls fibroblastic reticular cells (FRCs) adhesion to the

extracellular matr

Subcellular Location:

[Podoplanin]: Membrane; Single-pass type I membrane protein. Cell projection, lamellipodium membrane; Single-pass type I membrane protein. Cell projection, filopodium membrane; Single-pass type I membrane protein. Cell projection,



microvillus membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Membrane raft. Apical cell membrane. Basolateral cell membrane. Cell projection, invadopodium. Note=Localized to actin-rich microvilli and plasma membrane projections such as filopodia, lamellipodia and ruffles (By similarity). Association to the lipid rafts is required for PDPN-induced epithelial to mesenchymal transition (EMT) (PubMed:21376833). Colocalizes with CD9 in tetraspanin microdomains (PubMed:18541721). Localiz

## **Expression:**

Highly expressed in placenta, lung, skeletal muscle and brain. Weakly expressed in brain, kidney and liver. In placenta, expressed on the apical plasma membrane of endothelium. In lung, expressed in alveolar epithelium. Up-regulated in colorectal tumors and expressed in 25% of early oral squamous cell carcinomas.

## **Products Images**