

# Recombinant Protein Technical Manual Recombinant Human Podoplanin/PDPN Protein (His Tag) RPES2230

### **Product Data:**

**Product SKU:** RPES2230 **Size:** 10μg

Species: Human Cells

**Uniprot:** Q86YL7

### **Protein Information:**

Molecular Mass: 12.2 kDa

AP Molecular Mass: 27 kDa

**Tag:** C-6His

**Bio-activity:** 

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

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  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 a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

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

Application:

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

GP36

# Immunogen Information:

Sequence: Ala23-Leu131

## **Background**:

Podoplanin is a type transmembrane protein that belongs to Podoplanin family. PDPN expressed in various specialized cell types throughout the body. It highly expressed in placenta, lung, skeletal muscle and brain, weakly expressed in brain, kidney and liver. In placenta, PDPN expressed on the apical plasma membrane of endothelium, in lung, expressed in alveolar epithelium. PDPN physiological function is related to its mucintype character. PDPN may be involved in cell migration and/or actin cytoskeleton organization. When expressed in keratinocytes, induces changes in cell morphology with transfected cells showing an elongated shape, numerous membrane protrusions, and major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion. It requires for normal lung cell proliferation and alveolus formation at birth and Induces platelet aggregation. Nevertheless, it doesn't have any effect on amino acid transport and the aquaporin-type water channels.