# abcam

### Product datasheet

## Recombinant Human Podoplanin protein ab152053

**Description** 

Product name Recombinant Human Podoplanin protein

**Purity** > 95 % SDS-PAGE.

Purity is greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.

Endotoxin level < 1.000 Eu/µg
Expression system HEK 293 cells

Accession Q86YL7

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** ASTGQPEDDTETTGLEGGVAMPGAEDDVVTPGTSEDRY

KSGLTTLVATSV

NSVTGIRIEDLPTSESTVHAQEQSPSATASNVATSHSTEKV

DGDTQTTVE KDGLSTVTLVDHHHHHH

Predicted molecular weight 12 kDa including tags

Amino acids 23 to 131

Tags His tag C-Terminus

**Description** Recombinant Human Podoplanin / gp36 protein

**Specifications** 

Our **Abpromise guarantee** covers the use of **ab152053** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**HPLC** 

Form Lyophilized

**Preparation and Storage** 

Stability and Storage Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -

20°C long term.

1

pH: 7.20

Constituents: 99% Phosphate Buffer, 0.88% Sodium chloride

#### Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in 1X PBS. It is not recommended to reconstitute to a concentration less than 100  $\mu$ g/ml. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. For long term storage aliquot and store at < -20°C.

#### General Info

#### Function 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, major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion. Required for normal lung cell proliferation and alveolus formation at birth. Induces platelet aggregation. Does not have any effect on folic acid or amino acid transport. Does not function as a water channel or as a regulator of aquaporin-type

water channels.

Tissue specificity 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.

**Sequence similarities** Belongs to the podoplanin family.

Post-translational modifications

Extensively O-glycosylated. Contains sialic acid residues. O-glycosylation is necessary for platelet

aggregation activity.

The N-terminus is blocked.

**Cellular localization** Membrane. Cell projection > filopodium membrane. Cell projection > lamellipodium membrane.

Cell projection > microvillus membrane. Cell projection > ruffle membrane. Localized to actin-rich

microvilli and plasma membrane projections such as filopodia, lamellipodia and ruffles.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors