

Datasheet for ABIN2666858

Podoplanin Protein (PDPN) (AA 12-137, C-Term) (Fc Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	25 µg
Target:	Podoplanin (PDPN)
Protein Characteristics:	AA 12-137, C-Term
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Podoplanin protein is labelled with Fc Tag.
Application:	Flow Cytometry (FACS)

Product Details

Purity:	> 95 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 0.1 EU per µg of protein as determine by the LAL method.

Target Details

Target:	Podoplanin (PDPN)
Alternative Name:	Podoplanin (PDPN Products)
Background:	Podoplanin, also termed GP38, is a 38 kD type I transmembrane sialoglycoprotein and a member of the podoplanin family. Mouse and human GP38 share 46 % amino acid sequence

Target Details

homology. Alternative splicing transcripts, encoding different isoforms of GP38, have been identified. Structurally, GP38 has a 119 amino acid extracellular domain (ECD), a 21 amino acid transmembrane region, and a 10 amino acid cytoplasmic tail. This type I protein is heavily O-glycosylated and has a diverse distribution in human tissues, including glomerular epithelial cells, lung alveolar cells, lymphatic endothelial cells, and neural tissues. GP38 is also expressed by tumor cells such as testicular seminomas, squamous cell carcinomas, colorectal tumors, and brain tumors. Therefore, this protein is a target of antibody therapy in cancer treatment. GP38 induces platelet aggregation and tumor metastasis through its association with CLEC2. The binding of GP38 and CLEC2 is important for maintaining high endothelial cell venule integrity. Also, GP38 is necessary for lymphatic vessel formation, normal lung cell proliferation, and alveolus formation at birth. In addition, GP38 was shown to be a novel marker for immature hepatic progenitor cells in fetal livers. GP38 is upregulated in Th17 cells in the arthritic joints in SKG mice, suggesting that this protein could be a useful Th17 cell marker for diagnosing pathological conditions of autoimmune diseases, including rheumatoid arthritis.

Molecular Weight: This 362 amino acid recombinant protein predicted has a molecular mass of approximately 39.8 kDa. The protein migrates at about 60 kDa by SDS-PAGE in DTT-reducing conditions and about 130 kDa in non-reducing conditions. The predicted N-terminal amino acid

Pathways: [Dicarboxylic Acid Transport](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Biological activity: Recombinant mouse podoplanin, when coated on a plate (2 µg/ml, 100 µl/well), is able to bind mouse CLEC-2 in a dose dependent manner with an apparent kD <1.0 nM.

Restrictions: For Research Use only

Handling

Format: Liquid

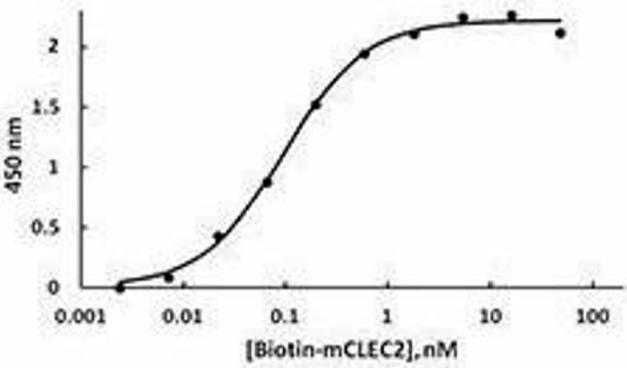
Reconstitution: For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 µg/mL in sterile buffer (PBS, HPBS, DPBS, and EBSS) containing carrier protein such as 1 % BSA or HSA. After dilution, the cytokine can be stored between 2 °C and 8 °C for one month or from -20 °C to -70 °C for up to 3 months.

Concentration: 200 µg/mL

Handling

Buffer:	0.22 µm filtered protein solution is in PBS.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Unopened vial can be stored between 2°C and 8°C for three months, at -20°C for six months, or at -70°C for one year.

Images



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Image 1.