# Recombinant Mouse Syndecan-4/Sdc4 protein (His Tag)

**Catalog Number: PDMM100202**

**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

## Description

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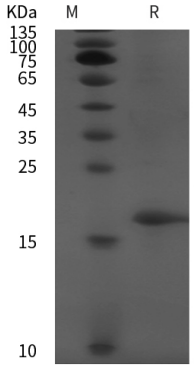
|---|---|
| **Species** | Mouse |
| **Source** | HEK293 Cells-derived Mouse Syndecan-4 protein Met1-Val146, with an C-terminal His |
| **Calculated MW** | 16.0 kDa |
| **Observed MW** | 18 kDa |
| **Accession** | O35988 |
| **Bio-activity** | Not validated for activity |

## Properties

| | |
|---|---|
| **Purity** | > 95% as determined by reducing SDS-PAGE. |
| **Endotoxin** | < 1.0 EU/mg of the protein as determined by the LAL method |
| **Storage** | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 in PBS with 5% Trehalose and 5% Mannitol. |
| **Reconstitution** | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis. |

## Data




> 95 % as determined by reducing SDS-PAGE.

## Background

SDC4 (Syndecan-4), also known as Syn4, is a transmembrane heparan sulfate proteoglycan that co-operates with integrins during cell-matrix interactions for the assembly of focal adhesions and actin stress fibers and in the phosphorylation of focal adhesion kinase (FAK) on Tyr397. Syndecan-4 plays roles in the formation of focal adhesions and stress fibers. The cytoplasmic domain of syndecan-4 interacts with a number of signalling and structural proteins, and both extracellular and cytoplasmic domains are necessary for regulated activation of associated transmembrane receptors. Syndecan-4/SDC4 is a heparan sulfate proteoglycan and works as a coreceptor for various growth factors. SDC4 deficiency limits neointimal formation after vascular injury by regulating vascular smooth muscle cells (VSMCs) proliferation and vascular progenitor cells (VPCs) mobilization. Therefore, SDC4 may be a novel therapeutic target for preventing arterial restenosis after angioplasty.

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