

Recombinant Mouse Syndecan-4/SDC4 Protein (aa 24-145, His Tag)

Catalog No. PKSM041205

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

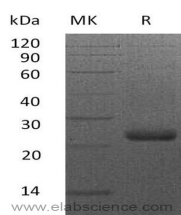
Description

Synonyms	AA959608;AW108331;ryudocan;Synd4;syndecan-4;SDC4;SYND4;Ryudocan core protein
Species	Mouse
Expression Host	Human Cells
Sequence	Glu24-Glu145
Accession	O35988
Calculated Molecular Weight	14.4 kDa
Observed molecular weight	24 kDa
Tag	C-6His

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Storage	Generally, 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,pH7.4.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

Mouse SDC4 is a ubiquitous transmembrane proteoglycan which belongs to the syndecan proteoglycan family. SDC4 is a cell surface proteoglycan that bears heparan sulfate. The four vertebrate syndecans, Syndecan-1 through -4, have similar short cytoplasmic domains and extracellular portions that diverge, except for HS attachment sites. Structurally diverse side chains add considerably to the size of the core proteins and serve as binding sites for growth factors, cytokines, and extracellular matrix proteins. Syndecans are present as homodimers or multimers, and are often expressed in developmental and cell type-specific patterns. It is expressed highly in liver, kidney and lung. SDC4 localizes to the focal

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adhesions of adherent cells and binds to a range of extracellular ligands, including growth factors and extracellular-matrix proteins. Through its extracellular domain, syndecan-4 cooperates with adhesion molecules and binds matrix components relevant for cell migration. As a heparan sulfate proteoglycan, SDC4 works as a coreceptor for various growth factors. Syn4 deficiency limits neointimal formation after vascular injury by regulating vascular smooth muscle cells (VSMCs) proliferation and vascular progenitor cells (VPCs) mobilization. SDC4 have an array of functions including regulating cell growth, differentiation, and adhesion.