

Recombinant Protein Technical Manual

Recombinant Mouse Syndecan-4/SDC4 Protein (Fc Tag)(Active) RPES5042

Product Data:

Product SKU: RPES5042 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: 035988

Protein Information:

Molecular Mass: 40.5 kDa

AP Molecular Mass: 33 kDa

Tag: C-Fc

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human MDK at

10 μg/ml (100 μl/well) can bind mouse SDC4-Fc with a linear range of 0.16.25

μg/ml.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein 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 sterile PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: AA959608;AW108331;ryudocan;Synd4;syndecan-4;SDC4;SYND4;Ryudocan core

protein

Immunogen Information:

Sequence: Met1-Val146

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.