



Product Datasheet

Product Name	Syndecan-4 Human Recombinant
Cata No	CB501194
Source	<i>Escherichia Coli.</i>
Synonyms	SDC4, SYND4, SYND-4, Amphiglycan, Ryudocan core protein, Syndecan-4.

Description

Syndecan-4 is a type I integral membrane heparan sulfate proteoglycan (HSPG), which was originally isolated from cloned rat microvascular endothelial cells as an antithrombin-binding molecule, and is now known to be a member of the syndecan family. Syndecan-4 binds to basic fibroblast growth factor (bFGF), midkine, and tissue factor pathway inhibitor via its heparan sulfate chains, and is thought to be involved in various biologic functions such as signaling of bFGF, anticoagulation, and focal adhesion formation. A previous study demonstrated that syndecan-4 is expressed in various tissues, and its level of expression in the kidney is stronger than those of other syndecan family members. Thus, syndecan-4 is thought to play certain roles in maintaining renal function. Moreover, it has been reported that proteoglycans, especially sulfated proteoglycans, are involved in organogenesis of the kidney.

Syndecan-4 Human Recombinant fused with 6X His tag produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 140 amino acids and having a molecular mass of 15.4 kDa.

The SYND-4 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The SYND4 (1 mg/ml) was lyophilized after extensive dialyses against 20mM PBS pH-7.4.

Reconstitution

It is recommended to reconstitute the lyophilized SYND-4 in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized SYND-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution SYND-4 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

**MASIRETEVIDPQDLLEGRYFSGALPDDEDVVGP
GQESDDFELSGSGD
LDDLED SMIGPEVVHPLVPLDNHUPERAGSGSQV
PTEPKKLEENEVIK
RISPVEESEDVSNKVSMSTVQGSNIFERTEVLAL
EHHHHHH**

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