

Human Syndecan-4 / SDC4 Protein (His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 10653-H08H

General Information

Gene Name Synonym:

SYND4

Protein Construction:

A DNA sequence encoding the human SDC4 (CAA47406.1) (Met1-Glu145) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu 19

Molecular Mass:

The recombinant human SDC4 consists of 138 amino acids and predicts a molecular mass of 15.3 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

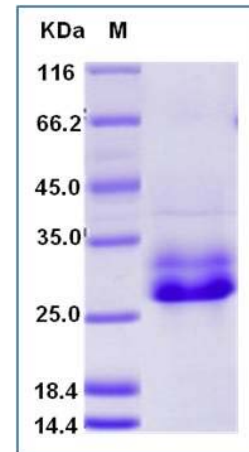
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1. Ikesue M, *et al.* (2011) Syndecan-4 deficiency limits neointimal formation after vascular injury by regulating vascular smooth muscle cell proliferation and vascular progenitor cell mobilization. *Arterioscler Thromb Vasc Biol.* 31(5): 1066-74.
2. Saoncella S, *et al.* (2004) Syndecan-4 regulates ATF-2 transcriptional activity in a Rac1-dependent manner. *J Biol Chem.* 279(45): 47172-6.
3. Bass MD, *et al.* (2002) Cytoplasmic interactions of syndecan-4 orchestrate adhesion receptor and growth factor receptor signalling. *Biochem J.* 368(Pt 1): 1-15.

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