Rat Syndecan-1 / SDC1 / CD138 Protein (His Tag)

Catalog Number: 80344-R08H

General Information

Gene Name Synonym:

SDC1

Protein Construction:

A DNA sequence encoding the rat SDC1 (P26260) (Met1-Lys253) was expressed with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: ≥ 95 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.

Endotoxin:

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

Predicted N terminal: Gln 23

Molecular Mass:

The recombinant rat SDC1 comprises 242 amino acids and predicts a molecular mass of 25.6 kDa. The apparent molecular mass of the recombinant protein is approximately 47 and 49 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

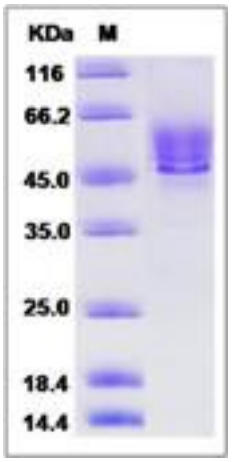
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Syndecan-1 also known as SDC1 and CD138, is the most extensively studied member of the syndecan family. It is found mainly in epithelial cells, but its expression is developmentally regulated during embryonic development. Syndecan-1/SDC1/CD138 has been shown to mediate cell adhesion to several ECM molecules, and to act as a coreceptor for fibroblast growth factors, potent angiogenic growth factors involved also in differentiation. Syndecan-1/SDC1/CD138 expression is reduced during malignant transformation of various epithelia, and this loss correlates with the histological differentiation grade of squamous cell carcinomas, lacking from poorly differentiated tumours. In squamous cell carcinomas of the head and neck, positive syndecan-1 expression correlates with a more favourable prognosis. Experimental studies on the role of Syndecan-1 in malignant transformation have shown that Syndecan-1/SDC1/CD138 expression is associated with the maintenance of epithelial morphology, anchorage-dependent growth and inhibition of invasiveness in vitro.

References

1.Inki P, et al. (1996) The role of syndecan-1 in malignancies. Ann Med. 28(1): 63-7.
2.Subramanian SV, et al. (1997) Regulated shedding of syndecan-1 and -4 ectodomains by thrombin and growth factor receptor activation. J Biol Chem. 272(23): 14713-20.
3.Park PW, et al. (2001) Exploitation of syndecan-1 shedding by Pseudomonas aeruginosa enhances virulence. Nature. 411(6833): 98-102.