Human Syndecan-1 / SDC1 / CD138 Protein (ECD, His Tag)

Catalog Number: 11429-H08H



General Information

Gene Name Synonym:

CD138; SDC; SYND1; syndecan; Syndecan-1

Protein Construction:

A DNA sequence encoding the human SDC1 (NP_002988.3) extracellular domain (Met 1-Glu 251) was expressed, with a polyhistidine tag at the C-terminus

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Endotoxin:

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

Predicted N terminal: Gln 18

Molecular Mass:

The recombinant human SDC1 consists of 245 amino acids and predictes a molecular mass of 25.6 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh SDC1 is approximately 48-55 kDa 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°C to -80°C.

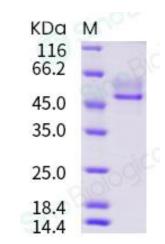
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.





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.