SANTA CRUZ BIOTECHNOLOGY, INC.

Syndecan-4 (h): 293 Lysate: sc-176179



BACKGROUND

Syndecans are type I integral membrane proteoglycans that contain both chondroitin sulfate and heparan sulfate groups. Syndecans are involved in cell-extracellular matrix adhesion and growth factor binding. Syndecan-1 (SYND1, also called CD138) is an extracellular matrix receptor which binds to collagens, Fibronectin and thrombospondin. Syndecan-1 and Syndecan-3 (also designated N-Syndecan) interact with MK (midkine), a growth/differentiation factor invloved in embryogenesis of the central nervous system. Syndecan-2 (also designated fibroglycan) is highly expressed at areas of high morphogenetic activity, such as epithelial-mesenchymal interfaces and the prechondrogenic and preosteogenic mesenchymal condensations. Syndecan-4 (also designated amphiglycan or ryudocan) functions cooperativley with integrins in the processes of cell spreading, focal adhesion assembly and Actin stress fiber assembly.

REFERENCES

- 1. Sanderson, R.D., et al. 1992. Adhesion of B lymphoid (MPC-11) cells to type I collagen is mediated by integral membrane proteoglycan, Syndecan. J. Immunol. 148: 3902-3911.
- 2. David, G., et al. 1993. Spatial and temporal changes in the expression of fibroglycan (Syndecan-2) during mouse embryonic development. Development 119: 841-854.
- 3. Salmivirta, M., et al. 1995. Syndecan family of cell surface proteoglycans: developmentally regulated receptors for extracellular effector molecules. Experientia 51: 863-872.
- 4. Nakanishi, T., et al. 1997. Expression of Syndecan-1 and -3 during embryogenesis of the central nervous system in relation to binding with midkine. J. Biochem. 121: 197-205.
- 5. Saoncella, S., et al. 1999. Syndecan-4 signals cooperatively with integrins in a Rho-dependent manner in the assembly of focal adhesions and Actin stress fibers. Proc. Natl. Acad. Sci. USA 96: 2805-2810.

CHROMOSOMAL LOCATION

Genetic locus: SDC4 (human) mapping to 20q13.12.

PRODUCT

Syndecan-4 (h): 293 Lysate represents a lysate of human Syndecan-4 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Syndecan-4 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Syndecan-4 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.