**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 collagen, Fibronectin and thrombospondin. Syndecan-1 and Syndecan-3 (also designated N-Syndecan) interact with MK (midkine), a growth/differentiation factor involved 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 cooperatively with integrins in the processes of cell spreading, focal adhesion assembly and Actin stress fiber assembly.

**CHROMOSOMAL LOCATION**

Genetic locus: SDC4 (human) mapping to 20q13.12; Sdc4 (mouse) mapping to 2 H3.

**SOURCE**

Syndecan-4 (5G9) is a mouse monoclonal antibody raised against Syndecan-4 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG₂k kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Syndecan-4 (5G9) is available conjugated to agarose (sc-12766 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP [sc-12766 HRP], 200 μg/ml, for WB, (HCP) and ELISA; to either phycocerythrin (sc-12766 PE), fluorescein (sc-12766 FITC), Alexa Fluor® 488 (sc-12766 AF488), Alexa Fluor® 546 (sc-12766 AF546), Alexa Fluor® 594 (sc-12766 AF594) or Alexa Fluor® 647 (sc-12766 AF647), 200 μg/ml, for WB (RGB), IF, (HCP) and FCM; and to either Alexa Fluor® 680 (sc-12766 AF680) or Alexa Fluor® 790 (sc-12766 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

Syndecan-4 (5G9) is recommended for detection of the ectodomain of Syndecan-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μg per 1 x 10⁶ cells).


Molecular Weight of Syndecan-4: 24 kDa.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

<table>
<thead>
<tr>
<th>Protein</th>
<th>Antibody</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syndecan-4 (5G9)</td>
<td>sc-12766</td>
<td>Western blot analysis of Syndecan-4 expression in HeLa (A) and MDA-MB-231 (B) whole cell lysates.</td>
</tr>
<tr>
<td>Antibody against Syndecan-4</td>
<td>sc-12766 PE</td>
<td>Intracellular FCM analysis of fixed and permeabilized Jurkat cells. Black line histogram represents the isotype control, normal mouse IgG₂k PE: sc-9687.</td>
</tr>
</tbody>
</table>

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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