chondroitin sulfate (PG-4): sc-517303

BACKGROUND

Chondroitin sulfate is a sulfated glycosaminoglycan (GAG) composed of a chain of alternating sugars, usually attached to proteins as part of a proteoglycan. Chondroitin sulfate is a major component of the extracellular matrix, and it plays a key role in maintaining the structural integrity of the tissue. Chondroitin sulfate is an important structural component of cartilage and is responsible for most of its resistance to compression. This molecule also has regulatory roles, as it readily interacts with proteins in the extracellular matrix due to its negative charges. These interactions are important for regulating a diverse array of cellular activities. In the nervous system, Chondroitin sulfate proteoglycans function to regulate the growth and development of the nervous system as well as the nervous system response to injury. Chondroitin is commonly used in dietary supplements as an alternative medicine to treat osteoarthritis.

REFERENCES


SOURCE

chondroitin sulfate (PG-4) is a mouse monoclonal antibody raised against dermal fibroblasts of human origin.

PRODUCT

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

APPLICATIONS

chondroitin sulfate (PG-4) is recommended for detection of a glycosaminoglycan epitope in both dermatan sulfate and chondroitin sulfate proteoglycans of human skin 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 1:150-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Positive Controls: HeLa whole cell lysate: sc-2200; A-10 cell lysate: sc-3806 or L6 whole cell lysate: sc-364196.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

chondroitin sulfate (PG-4): sc-517303. Western blot analysis of chondroitin sulfate expression in HeLa (A), A-10 (B), L6 (C), SKll (D), C3C12 (E) and P19 (F) whole cell lysates.


STORAGE

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. 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.