**BACKGROUND**

Sulf-2 (sulfatase 2), also known as HSULF-2, is an extracellular endosulfatase belonging to the sulfatase family. Members of the sulfatase family each contain a conserved active site with a posttranslationally generated α-formyl-glycine that is essential for their catalytic activity. These enzymes are responsible for the hydrolysis of sulfate ester bonds. Sulf-1 (sulfatase 1) and Sulf-2 specifically interact with heparin sulfate proteoglycans (HSPGs) and hydrolyze the glucosamine-6-sulfate modifications, thus regulating the interactions of HSPGs with a variety of signaling molecules. As key components of cell surfaces and extracellular matrices, HSPGs modulate growth factor activities and thereby influence cell growth and differentiation. Additionally, HSPGs play a critical role in regulating tumor cell metastasis by mediating cell adhesion and the activities of growth and angiogenic factors. This suggests an important role for Sulf-1 and Sulf-2 in tumor progression.

**REFERENCES**


**APPLICATIONS**

Sulf-2 (G-4) is recommended for detection of Sulf-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight (predicted) of Sulf-2: 100 kDa.

Molecular Weight (observed) of Sulf-2: 68 kDa.

Positive Controls: Sulf-2 (h2): 293T Lysate: sc-177997, MCF7 whole cell lysate: sc-2206 or Y79 cell lysate: sc-2240.

**RECOMMENDED SUPPORT REAGENTS**

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


Positive Controls: Sulf-2 (h2): 293T Lysate: sc-177997, MCF7 whole cell lysate: sc-2206 or Y79 cell lysate: sc-2240.

**DATA**

Sulf-2 (G-4): sc-271772. Western blot analysis of Sulf-2 expression in MC27 (A), Y79 (B), c4 (C), NIH/STI (D), RPE-J (E) and BAF2 (F) whole cell lysates.

Sulf-2 (G-4): sc-271772. Western blot analysis of Sulf-2 expression in non-transfected: sc-117752 (A) and human Sulf-2 transfected: sc-177997 (B) 293T whole cell lysates.

**SOURCE**

Sulf-2 (G-4) is a mouse monoclonal antibody raised against amino acids 481-560 mapping within an extracellular domain of Sulf-2 of human origin.

**PRODUCT**

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

**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.