

Pannexin-2 (S-15): sc-51384

BACKGROUND

Gap junctions are formed by a hexameric group of proteins called connexins for the transport of low molecular weight proteins from cell to cell. Connexins, which are present in all metazoan organisms, serve diverse functions ranging from control of cell growth and differentiation to electric conduction in excitable tissues. Several mammalian cells with malignant phenotypes exhibit decreased connexin expression and gap junction communication. The pannexin gene family encodes a second class of putative gap junction proteins. Pannexins are highly conserved in invertebrates and mammals, indicating the importance of their gap junctional coupling function. Mammalian Pannexin-1 and Pannexin-3 are closely related, while Pannexin-2 is more distantly related. Pannexin-2 is a transmembrane protein expressed in the central nervous system that is unable to assemble in homomeric channels but forms heteromeric channels with Pannexin-1.

CHROMOSOMAL LOCATION

Genetic locus: PANX2 (human) mapping to 22q13.33; Panx2 (mouse) mapping to 15 E3.

SOURCE

Pannexin-2 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of Pannexin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51384 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Pannexin-2 (S-15) is recommended for detection of Pannexin-2 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Pannexin-2 (S-15) is also recommended for detection of Pannexin-2 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for Pannexin-2 siRNA (h): sc-106351, Pannexin-2 siRNA (m): sc-152004, Pannexin-2 shRNA Plasmid (h): sc-106351-SH, Pannexin-2 shRNA Plasmid (m): sc-152004-SH, Pannexin-2 shRNA (h) Lentiviral Particles: sc-106351-V and Pannexin-2 shRNA (m) Lentiviral Particles: sc-152004-V.

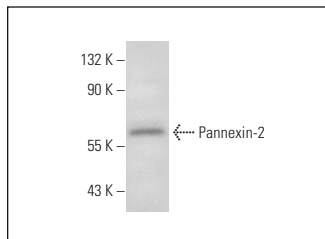
Molecular Weight of Pannexin-2: 70 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or rat brain extract: sc-2392.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Pannexin-2 (S-15): sc-51384. Western blot analysis of Pannexin-2 expression in rat brain tissue extract.

STORAGE

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

PROTOCOLS

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

MONOS
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Try **Pannexin-2 (2B11): sc-517064**, our highly recommended monoclonal alternative to Pannexin-2 (S-15).