

Pannexin-2 (Z-25): sc-133880

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.

REFERENCES

1. Bruzzone, R., et al. 2003. Pannexins, a family of gap junction proteins expressed in brain. *Proc. Natl. Acad. Sci. USA* 100: 13644-13649.
2. Bao, L., et al. 2004. Pannexin membrane channels are mechanosensitive conduits for ATP. *FEBS Lett.* 572: 65-68.

CHROMOSOMAL LOCATION

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

SOURCE

Pannexin-2 (Z-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic Pannexin-2 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Pannexin-2 (Z-25) is recommended for detection of Pannexin-2 of mouse, rat, human and zebrafish 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

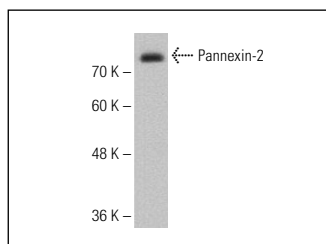
Molecular Weight of Pannexin-2: 70 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Pannexin-2 (Z-25): sc-133880. Western blot analysis of Pannexin-2 expression in Hep G2 whole cell lysate.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Pannexin-2 (2B11): sc-517064**, our highly recommended monoclonal alternative to Pannexin-2 (Z-25).