

connexin 36 (H-130): sc-25715

BACKGROUND

The connexin family of proteins form hexameric complexes called "connexons" that facilitate movement of low molecular weight proteins between cells via gap junctions. Connexin proteins share a common topology of four transmembrane α -helical domains, two extracellular loops, a cytoplasmic loop and cytoplasmic N- and C-termini. Many of the key functional differences arise from specific amino-acid substitutions in the most highly conserved domains, the transmembrane and extracellular regions. Each of the approximately 20 connexin isoforms produces channels with distinct permeabilities and electrical and chemical sensitivities; therefore, one connexin usually cannot fully substitute for another. Consequently, a wide variety of malignant phenotypes associate with decreased connexin expression and gap junction communication, dependent on the particular connexin that is affected. For instance, global ischemia induces connexin 36 expression, implying a role for this connexin in inter-neuronal survival.

CHROMOSOMAL LOCATION

Genetic locus: GJD2 (human) mapping to 15q14; Gjd2 (mouse) mapping to 2 E4.

SOURCE

connexin 36 (H-130) is a rabbit polyclonal antibody corresponding to amino acids 81-210 mapping within an internal region of connexin 36 of human origin.

PRODUCT

Each vial contains 200 μ g IgG 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.

APPLICATIONS

connexin 36 (H-130) is recommended for detection of connexin 36 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-em.bedded 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).

connexin 36 (H-130) is also recommended for detection of connexin 36 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for connexin 36 siRNA (h): sc-35089, connexin 36 siRNA (m): sc-35090, connexin 36 shRNA Plasmid (h): sc-35089-SH, connexin 36 shRNA Plasmid (m): sc-35090-SH, connexin 36 shRNA (h) Lentiviral Particles: sc-35089-V and connexin 36 shRNA (m) Lentiviral Particles: sc-35090-V.

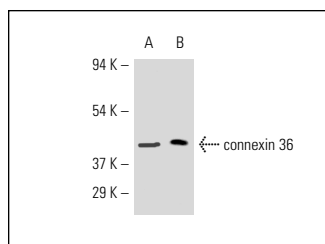
Molecular Weight of connexin 36: 42 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, PC-12 cell lysate: sc-2250 or rat adrenal gland tissue extract.

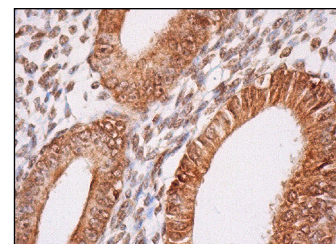
RECOMMENDED SECONDARY REAGENTS

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



connexin 36 (H-130): sc-25715. Western blot analysis of connexin 36 expression in rat adrenal gland tissue extract (A) and PC-12 whole cell lysate (B).



connexin 36 (H-130): sc-25715. Immunoperoxidase staining of formalin fixed, paraffin-embedded human uterus tissue showing cytoplasmic and nuclear staining of glandular cells.

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 **connexin 36 (H-9): sc-398063**, our highly recommended monoclonal alternative to connexin 36 (H-130).