SANTA CRUZ BIOTECHNOLOGY, INC.

# connexin 59 (N-24): sc-130130

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 $\alpha$-helical domains, two extracellular loops, a cytoplasmic loop and cytoplasmic N- and C-termini. Many of the key functional differences between connexins arise from specific amino acid substitutions in the most highly conserved domains: the transmembrane and extracellular regions. Connexin 59, also known as connexin 58, GJA9 (gap junction $\alpha$-9 protein) or GJA10 (gap junction $\alpha$-10 protein), is a 515 amino acid multi-pass membrane protein that belongs to the connexin family. Localized to the cell membrane and to gap junctions, connexin 59 functions as part of a connexon complex through which low molecular weight materials diffuse from one cell to another.

## REFERENCES


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6. Yeager, M. and Harris, A.L. 2007. Gap junction channel structure in the early 21st century: facts and fantasies. Curr. Opin. Cell Biol. 19: 521-528.
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## CHROMOSOMAL LOCATION

Genetic locus: GJA9 (human) mapping to 1p34.3.

## SOURCE

connexin 59 (N-24) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of connexin 59 of human origin.

## PRODUCT

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

## APPLICATIONS

connexin 59 (N-24) is recommended for detection of connexin 59 of 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), 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 connexin 59 siRNA (h): sc-88510, connexin 59 shRNA Plasmid (h): sc-88510-SH and connexin 59 shRNA (h) Lentiviral Particles: sc-88510-V.

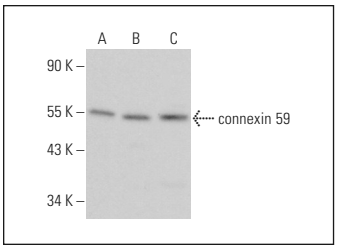
Molecular Weight of connexin 59: 59 kDa.

Positive Control: MCF7 whole cell lysate: sc-2206, SJRH30 cell lysate: sc-2287 or A-673 cell lysate: sc-2414.

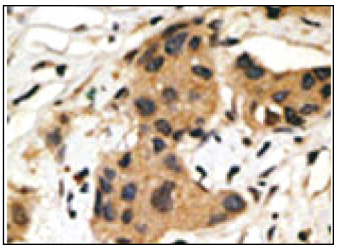
## RECOMMENDED SECONDARY REAGENTS

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 59 (N-24): sc-130130. Western blot analysis of connexin 59 expression in MCF7 (**A**), SJRH30 (**B**) and A-673 (**C**) whole cell lysates.



connexin 59 (N-24): sc-130130. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

## 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.