

connexin 40.1 (S-12): sc-104849

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 between connexins arise from specific amino-acid substitutions in the most highly conserved domains: the transmembrane and extracellular regions. connexin 40.1, also known as GJD4 (gap junction protein, δ 4, 40.1 kDa) or CX40.1, is a 370 amino acid multi-pass membrane protein that localizes to the cell junction and is expressed in liver, heart, kidney, pancreas, placenta and skeletal muscle. Existing as a component of hexameric connexin complexes, connexin 40.1 helps to facilitate the diffusion of low molecular weight proteins from one cell to another cell.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GJD4 (human) mapping to 10p11.21.

SOURCE

connexin 40.1 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of connexin 40.1 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-104849 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

connexin 40.1 (S-12) is recommended for detection of connexin 40.1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for connexin 40.1 siRNA (h): sc-90537, connexin 40.1 shRNA Plasmid (h): sc-90537-SH and connexin 40.1 shRNA (h) Lentiviral Particles: sc-90537-V.

Molecular Weight (predicted) of connexin 40.1: 40 kDa.

Molecular Weight (observed) of connexin 40.1: 49 kDa.

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) 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.

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.