

connexin 31 (H-43): sc-134612

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. Connexin 31, also known as GJB3 (gap junction β -3 protein), CX31, DFNA2 or EKV, is expressed in skin, testis, placenta, cochlea and developing hindbrain and, in mice, it is also found in peripheral auditory nerves. Mutations in the gene encoding connexin 31 can result in non-syndromic sensorineural deafness autosomal dominant type 2 (DFNA2) and/or erythrokeratoderma variabilis (EVK), a condition characterized by localized or generalized hyperkeratosis and random, transient erythematous patches.

CHROMOSOMAL LOCATION

Genetic locus: GJB3 (human) mapping to 1p34.3; Gjb3 (mouse) mapping to 4 D2.2.

SOURCE

connexin 31 (H-43) is a rabbit polyclonal antibody raised against amino acids 135-177 mapping within an extracellular domain of connexin 31 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 31 (H-43) is recommended for detection of connexin 31 of human and, to a lesser extent, mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other connexin family members.

connexin 31 (H-43) is also recommended for detection of connexin 31 in additional species, including equine and bovine.

Suitable for use as control antibody for connexin 31 siRNA (h): sc-78791, connexin 31 siRNA (m): sc-142493, connexin 31 shRNA Plasmid (h): sc-78791-SH, connexin 31 shRNA Plasmid (m): sc-142493-SH, connexin 31 shRNA (h) Lentiviral Particles: sc-78791-V and connexin 31 shRNA (m) Lentiviral Particles: sc-142493-V.

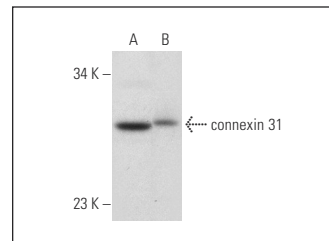
Molecular Weight of connexin 31: 31 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

DATA



connexin 31 (H-43): sc-134612. Western blot analysis of connexin 31 expression in EOC 20 (A) and F9 (B) whole cell lysates.

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.


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Try **connexin 31 (LL8): sc-81803**, our highly recommended monoclonal alternative to connexin 31 (H-43).