connexin 30 (G-2): sc-514847

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 30, also known as GJB6 (gap junction β 6), ED2, EDH, HED or DFNA3, is a 261 amino acid multi-pass membrane protein that localizes to the cell junction and belongs to the connexin family. Functioning as a hexamer with other connexin proteins, connexin 30 facilitates the diffusion of low molecular weight materials from one cell to another. Defects in the gene encoding connexin 30 are the cause of ectodermal dysplasia type 2 (ED2) and nonsyndromic sensorineural deafness autosomal dominant type 3 (DFNA3), the former of which is characterized by abnormal development of ectodermal structures (such as skin and nails).

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: GJB6 (human) mapping to 13q12.11; Gjb6 (mouse) mapping to 14 C3.

PRODUCT

connexin 30 (G-2) is a mouse monoclonal antibody raised against amino acids 215-261 mapping at the C-terminus of connexin 30 of human origin.

APPLICATIONS

connexin 30 (G-2) is recommended for detection of connexin 30 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for connexin 30 siRNA (h): sc-43074, connexin 30 siRNA (m): sc-43075, connexin 30 shRNA Plasmid (h): sc-43074-SH, connexin 30 shRNA Plasmid (m): sc-43075-SH, connexin 30 siRNA (h) Lentiviral Particles: sc-43074-V and connexin 30 shRNA (m) Lentiviral Particles: sc-43075-V.

Molecular Weight of connexin 30: 30 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257, mouse cerebellum extract: sc-2403 or human cerebral cortex extract: sc-516707.

DATA

SELECT PRODUCT CITATIONS


STORAGE

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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