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connexin 43 (h2): 293T Lysate: sc-175005

BACKGROUND

The connexins are a group of gap junction proteins which form a hexamer to compose a connexon. Clusters of connexons form a gap junction through which low molecular weight proteins may diffuse from cell to cell. Several mammalian cells with malignant phenotypes exhibit decreased connexin expression and gap junction communication. In Src transformed cells, there is a decrease in gap junctional communication, which appears to be associated with tyrosine phosphorylation of connexin 43. Activated c-Src phosphorylates the C-terminal tail of connexin 43 on Tyr 265, resulting in a stable interaction between both proteins, which leads to inhibition of gap junctional communication. In addition to tyrosine phosphorylation, connexin 43 has also been shown to be phosphorylated on serine in the absence of Src kinases and on both serine and tyrosine in cells expressing Src kinases, such as c-Src and/or pp60v-Src. In human vascular endothelial cells, connexin 43 is posttranslationally modified during mitosis. Mitosis-specific phosphorylation of connexin 43 correlates with the transient loss of gap junction intercellular communication and redistribution of connexin 43.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GJA1 (human) mapping to 6q22.31.

RESEARCH USE

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

PRODUCT

connexin 43 (h2): 293T Lysate represents a lysate of human connexin 43 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

connexin 43 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive connexin 43 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.