



# SZABO SCANDIC

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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Gefahrgutzuschlag
- Expressversand

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# connexin 32 (h2): 293T Lysate: sc-174827

## 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 arise from specific amino-acid substitutions in the most highly conserved domains, the transmembrane and extracellular regions. Each of the approximately 20 connexin isoforms produces channels with distinct permeabilities and electrical and chemical sensitivities; therefore, one connexin usually cannot fully substitute for another. Consequently, a wide variety of malignant phenotypes associate with decreased connexin expression and gap junction communication, dependent on the particular connexin that is affected. For instance, mutations in connexin 32 result in Charcot-Marie-Tooth disease, a demyelinating disease of the peripheral nervous system.

## REFERENCES

1. Manjunath, C.K., et al. 1987. Human cardiac gap junctions: isolation, ultrastructure, and protein composition. *J. Mol. Cell. Cardiol.* 19: 131-134.
2. Grossman, H.B., et al. 1994. Decreased connexin expression and intercellular communication in human bladder cancer cells. *Cancer Res.* 54: 3062-3065.
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4. Menichella, D.M., et al. 2003. Connexins are critical for normal myelination in the CNS. *J. Neurosci.* 23: 5963-5973.
5. King, T.J., et al. 2004. The gap junction protein connexin 32 is a mouse lung tumor suppressor. *Cancer Res.* 64: 7191-7196.
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7. Nakashima, Y., et al. 2004. Expression of gap junction protein connexin 32 in chronic hepatitis, liver cirrhosis and hepatocellular carcinoma. *J. Gastroenterol.* 39: 763-768.
8. Fujimoto, E., et al. 2005. Cytotoxic effect of the Her-2/Her-1 inhibitor PKI-166 on renal cancer cells expressing the connexin 32 gene. *J. Pharmacol. Sci.* 97: 294-298.

## CHROMOSOMAL LOCATION

Genetic locus: GJB1 (human) mapping to Xq13.1.

## PRODUCT

connexin 32 (h2): 293T Lysate represents a lysate of human connexin 32 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

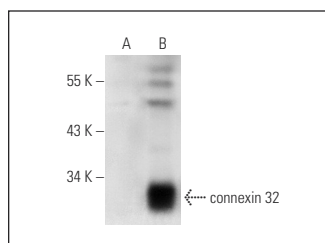
## APPLICATIONS

connexin 32 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive connexin 32 antibodies. Recommended use: 10-20  $\mu$ l per lane.

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

connexin 32 (CXN-32): sc-59948 is recommended as a positive control antibody for Western Blot analysis of enhanced human connexin 32 expression in connexin 32 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## DATA



connexin 32 (CXN-32): sc-59948. Western blot analysis of connexin 32 expression in non-transfected: sc-117752 (A) and human connexin 32 transfected: sc-174827 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.