SZABO SCANDIC

Part of Europa Biosite

# Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


**SZABO-SCANDIC HandelsgmbH**

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

# Sulfiredoxin (h2): 293T Lysate: sc-116088

## BACKGROUND

Sulfiredoxin, also designated Sulfiredoxin-1 and chromosome 20 open reading frame 139 (C20orf139), is a cytoplasmic antioxidant protein involved in signaling through catalytic reduction of oxidative modifications. It regulates peroxiredoxins (PRXs), a family of proteins that reduce hydroperoxides, by reducing the conserved cysteine from sulfinic to sulfenic acid. This impacts the role of PRX in the reduction of other downstream transcription factors and kinase signaling pathways. The Sulfiredoxin protein specifically acts on the PRDX1, PRDX2, PRDX3 and PRDX4 peroxiredoxins, but not on PRDX5 or PRDX6. Sulfiredoxin acts as a phosphotransferase and an athioltransferase and is widely expressed, with highest levels detected in lung, spleen, kidney and thymus tissues.

## REFERENCES


1. Chang, T.S., Jeong, W., Woo, H.A., Lee, S.M., Park, S. and Rhee, S.G. 2004. Characterization of mammalian sulfiredoxin and its reactivation of hyperoxidized peroxiredoxin through reduction of cysteine sulfinic acid in the active site to cysteine. J. Biol. Chem. 279: 50994-51001.
2. Woo, H.A., Jeong, W., Chang, T.S., Park, K.J., Park, S.J., Yang, J.S. and Rhee, S.G. 2005. Reduction of cysteine sulfinic acid by sulfiredoxin is specific to 2-cys peroxiredoxins. J. Biol. Chem. 280: 3125-3128.
3. Bozonet, S.M., Findlay, V.J., Day, A.M., Cameron, J., Veal, E.A. and Morgan, B.A. 2005. Oxidation of a eukaryotic 2-cys peroxiredoxin is a molecular switch controlling the transcriptional response to increasing levels of hydrogen peroxide. J. Biol. Chem. 280: 23319-23327.
4. Findlay, V.J., Tapiero, H. and Townsend, D.M. 2005. Sulfiredoxin: a potential therapeutic agent? Biomed. Pharmacother. 59: 374-379.
5. Basu, M.K. and Koonin, E.V. 2005. Evolution of eukaryotic cysteine sulfinic acid reductase, sulfiredoxin (Srx), from bacterial chromosome partitioning protein ParB. Cell Cycle 4: 947-952.
6. Lee, D.Y., Rhee, S.G., Ferretti, J. and Gruschus, J.M. 2005. 1H, 15N, and 13C chemical shift assignments of the human sulfiredoxin (hSrx). J. Biomol. NMR 32: 339.
7. Jonsson, T.J., Murray, M.S., Johnson, L.C., Poole, L.B. and Lowther, W.T. 2005. Structural basis for the retroreduction of inactivated peroxiredoxins by human sulfiredoxin. Biochemistry 44: 8634-8642.


## CHROMOSOMAL LOCATION

Genetic locus: SRXN1 (human) mapping to 20p13.

## PRODUCT

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

## 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.

## APPLICATIONS

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

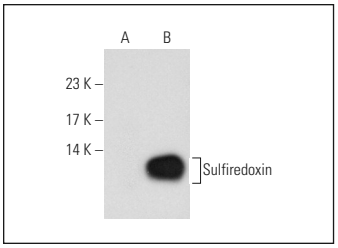
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Sulfiredoxin (B-10): sc-166786 is recommended as a positive control antibody for Western Blot analysis of enhanced human Sulfiredoxin expression in Sulfiredoxin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

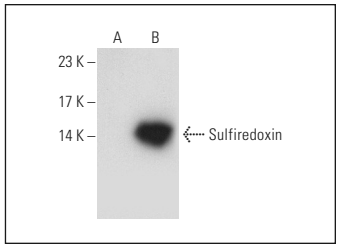
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA




Sulfiredoxin (B-10): sc-166786. Western blot analysis of Sulfiredoxin expression in non-transfected: sc-117752 (**A**) and human Sulfiredoxin transfected: sc-116088 (**B**) 293T whole cell lysates.




Sulfiredoxin (E-7): sc-166566. Western blot analysis of Sulfiredoxin expression in non-transfected: sc-117752 (**A**) and human Sulfiredoxin transfected: sc-116088 (**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 for detailed protocols and support products.