

Sulfiredoxin (C-17): sc-51208

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 a-thioltransferase and is widely expressed, with highest levels detected in lung, spleen, kidney and thymus tissues.

REFERENCES

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- Lee, D.Y. et al. 2005. 1H, 15N, and 13C chemical shift assignments of the human Sulfiredoxin (hSrx). *J. Biomol. NMR* 32: 339.
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- Jonsson, T.J. et al. 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; Srxn1 (mouse) mapping to 2 H1.

SOURCE

Sulfiredoxin (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Sulfiredoxin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51208 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Sulfiredoxin (C-17) is recommended for detection of Sulfiredoxin of mouse and human origin by Western Blotting (starting dilution 1:200, 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).

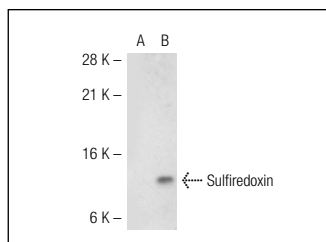
Sulfiredoxin (C-17) is also recommended for detection of Sulfiredoxin in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Sulfiredoxin siRNA (h): sc-61622, Sulfiredoxin siRNA (m): sc-61623, Sulfiredoxin shRNA Plasmid (h): sc-61622-SH, Sulfiredoxin shRNA Plasmid (m): sc-61623-SH, Sulfiredoxin shRNA (h) Lentiviral Particles: sc-61622-V and Sulfiredoxin shRNA (m) Lentiviral Particles: sc-61623-V.

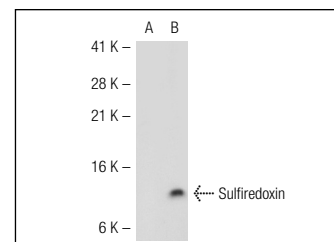
Molecular Weight of Sulfiredoxin: 13 kDa.

Positive Controls: Sulfiredoxin (h2): 293T Lysate: sc-116088.

DATA



Sulfiredoxin (C-17): sc-51208. Western blot analysis of Sulfiredoxin expression in non-transfected: sc-117752 (A) and human Sulfiredoxin transfected: sc-116088 (B) 293T whole cell lysates.



Sulfiredoxin (C-17): sc-51208. Western blot analysis of Sulfiredoxin expression in non-transfected: sc-117752 (A) and human Sulfiredoxin transfected: sc-112169 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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



Try **Sulfiredoxin (H-10): sc-514940** or **Sulfiredoxin (B-4): sc-373829**, our highly recommended monoclonal alternatives to Sulfiredoxin (C-17).