

Selenoprotein S (m): 293T Lysate: sc-127522

BACKGROUND

Selenium is an essential trace element that is incorporated as selenocysteine into the primary structure of Selenoproteins. Nutritional deficiency of selenium decreases Selenoprotein concentrations and leads to pathologic conditions. Most of the known Selenoproteins are members of the glutathione peroxidase or iodothyronine deiodinase families. Selenoprotein S, also known as VIMP or SELS, is a 189 amino acid single-pass membrane protein that localizes to the endoplasmic reticulum (ER) and contains a selenocysteine (Sec) residue at its active site. Interacting with Derlin-1 and VCP, Selenoprotein S is involved in the degradation of misfolded ER proteins, specifically participating in the transfer of misfolded proteins from the ER to the cytosol for subsequent proteasomal degradation. Aberrant expression of Selenoprotein S is associated with diabetes, cardiovascular disease and rheumatoid arthritis.

REFERENCES

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5. Zeng, J., et al. 2008. Role of SelS in lipopolysaccharide-induced inflammatory response in hepatoma Hep G2 cells. *Arch. Biochem. Biophys.* 478: 1-6.
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7. Du, J.L., et al. 2008. Association of SelS mRNA expression in omental adipose tissue with Homa-IR and serum Amyloid A in patients with type 2 diabetes mellitus. *Chin. Med. J.* 121: 1165-1168.
8. Marinou, I., et al. 2009. Evidence of epistasis between interleukin-1 and Selenoprotein S with susceptibility to RA. *Ann. Rheum. Dis.* 68: 1494-1497.
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CHROMOSOMAL LOCATION

Genetic locus: H47 (mouse) mapping to 7 C.

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.

RESEARCH USE

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

PRODUCT

Selenoprotein S (m): 293T Lysate represents a lysate of mouse Selenoprotein S transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Selenoprotein S (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Selenoprotein S antibodies. Recommended use: 10-20 µl per lane.

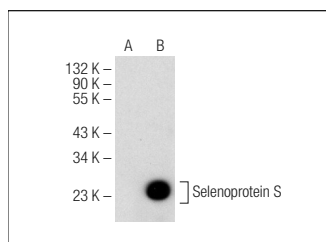
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Selenoprotein S (D-1): sc-365498 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Selenoprotein S expression in Selenoprotein S 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



Selenoprotein S (D-1): sc-365498. Western blot analysis of Selenoprotein S expression in non-transfected: sc-117752 (A) and mouse Selenoprotein S transfected: sc-127522 (B) 293T whole cell lysates.

PROTOCOLS

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