



# Selenoprotein P (m): 293T Lysate: sc-123443

## 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 P (SEPP1) is a major selenoprotein that is not a member of those families. It is an extracellular glycoprotein that is present in several isoforms and is the only selenoprotein known to contain multiple selenocysteine residues. Selenoprotein P is a heparin-binding protein that appears to be associated with endothelial cells and has been implicated as an oxidant defense in the extracellular space. Although there is evidence of several isoforms of the protein, all of them share the same amino-terminal sequence and therefore are likely products of the same gene. The gene which encodes Selenoprotein P maps to human chromosome 5q31.

## REFERENCES

1. 1979. Observations on effect of sodium selenite in prevention of Keshan disease. *Chin. Med. J.* 92: 471-476.
2. Hill, K.E., Lloyd, R.S. and Burk, R.F. 1993. Conserved nucleotide sequences in the open reading frame and 3' untranslated region of selenoprotein P mRNA. *Proc. Natl. Acad. Sci. USA* 90: 537-541.
3. Hill, K.E., Dasouki, M., Phillips, J.A. III and Burk, R.F. 1996. Human selenoprotein P gene maps to 5q31. *Genomics* 36: 550-551.
4. Chittum, H.S., Himeno, S., Hill, K.E. and Burk, R.F. 1996. Multiple forms of selenoprotein P in rat plasma. *Arch. Biochem. Biophys* 325: 124-128.
5. LocusLink Report (LocusID: 601484). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: Sepp1 (mouse) mapping to 15 A1.

## PRODUCT

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

## APPLICATIONS

Selenoprotein P (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Selenoprotein P 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.

## 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.