

# SCP2 (A-20): sc-32835

## BACKGROUND

Sterol carrier protein 2 (SCP2), also designated nonspecific lipid-transfer protein, mitochondrial precursor, is involved in the non-specific transfer of intracellular sterol and lipid molecules between membranes. A member of the thiolase family, SCP2 may also be involved in regulating steriodogenesis in fibroblasts, peroxisomes, liver and placenta. In the liver it is a cytoplasmic protein but in steroidogenic tissues it localizes with mitochondria. Isoform SCPx is associated with the peroxisome. SCP2 is associated with Zellweger syndrome (cerebro-hepatic-renal syndrome), characterized by peroxisome deficiency and an impairment in plasmalogen and bile acid synthesis.

## REFERENCES

1. Yamamoto, R., et al. 1991. Cloning and expression of a cDNA encoding human sterol carrier protein 2. *Proc. Natl. Acad. Sci. USA* 88: 463-467.
2. He, Z., et al. 1991. cDNAs encoding members of a family of proteins related to human sterol carrier protein 2 and assignment of the gene to human chromosome 1 p21-pter. *DNA Cell Biol.* 10: 559-569.
3. Yamamoto, R., et al. 1992. Localization of human sterol carrier protein 2 gene and cDNA expression in COS-7 cell. *Hokkaido Igaku Zasshi* 67: 839-848.
4. Szyperki, T., et al. 1993. NMR determination of the secondary structure and the three-dimensional polypeptide backbone fold of the human sterol carrier protein 2. *FEBS. Lett.* 335: 18-26.
5. Seedorf, U., et al. 1994. Structure-activity studies of human sterol carrier protein 2. *J. Biol. Chem.* 269: 2613-2618.
6. Ohba, T., et al. 1994. The structure of the human sterol carrier protein X/sterol carrier protein 2 gene (SCP2). *Genomics* 24: 370-374.

## CHROMOSOMAL LOCATION

Genetic locus: SCP2 (human) mapping to 1p32.3; Scp2 (mouse) mapping to 4 C7.

## SOURCE

SCP2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SCP2 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-32835 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

SCP2 (A-20) is recommended for detection of SCP2 isoform SCP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SCP2 (A-20) is also recommended for detection of SCP2 isoform SCP2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SCP2 siRNA (h): sc-44636, SCP2 siRNA (m): sc-44637, SCP2 shRNA Plasmid (h): sc-44636-SH, SCP2 shRNA Plasmid (m): sc-44637-SH, SCP2 shRNA (h) Lentiviral Particles: sc-44636-V and SCP2 shRNA (m) Lentiviral Particles: sc-44637-V.

Molecular Weight of SCP2: 13 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

1. Kanoh, N., et al. 2013. Dual structure-activity relationship of osteoclastogenesis inhibitor methyl gerfelin based on TEG scanning. *Bioconjug. Chem.* 24: 44-52.

## RESEARCH USE

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