SANTA CRUZ BIOTECHNOLOGY, INC.

OSCP (C-16): sc-74786

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Oligomycin sensitivity conferring protein (OSCP), also designated ATP5O, is the O subunit of ATP synthase which localizes to the mitochondria and catalyzes ATP synthesis. Mitochondrial ATP synthases (ATPases) transduce the energy contained in membrane electrochemical proton gradients into the energy required for synthesis of high-energy phosphate bonds. ATPases contain two linked complexes: F_1, the hydrophilic catalytic core; and F_0, the membrane-embedded protein channel. F_1 consists of three α chains and three β chains, which are weakly homologous, as well as one γ chain, one δ chain and one ε chain. F_0 consists of three subunits: a, b and c. The ε chain of F_1 contains 50 amino acids and is the smallest of the five ATPase F_1 chains.

CHROMOSOMAL LOCATION

Genetic locus: ATP5O (human) mapping to 21q22.11; Atp5o (mouse) mapping to 16 C4.

SOURCE

OSCP (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of OSCP 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-74786 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.

RESEARCH USE

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

APPLICATIONS

OSCP (C-16) is recommended for detection of OSCP of mouse, rat 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).

OSCP (C-16) is also recommended for detection of OSCP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for OSCP siRNA (h): sc-62452, OSCP siRNA (m): sc-76010, OSCP shRNA Plasmid (h): sc-62452-SH, OSCP shRNA Plasmid (m): sc-76010-SH, OSCP shRNA (h) Lentiviral Particles: sc-62452-V and OSCP shRNA (m) Lentiviral Particles: sc-76010-V.

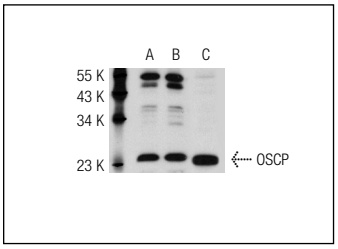
Molecular Weight of OSCP: 23 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or human heart tissue extract.

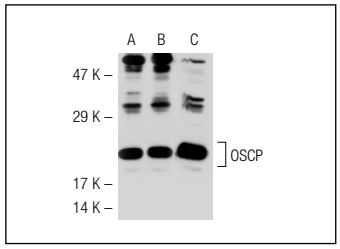
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



OSCP (C-16): sc-74786. Western blot analysis of OSCP expression in non-transfected: sc-117752 (**A**) and mouse OSCP transfected: sc-122274 (**B**) 293T whole cell lysates and mouse heart tissue extract (**C**).



OSCP (C-16): sc-74786. Western blot analysis of OSCP expression in non-transfected 293T: sc-117752 (**A**), mouse OSCP transfected 293T: sc-122274 (**B**) and HeLa (**C**) whole cell lysates.

PROTOCOLS

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