

SMP30 (K-18): sc-25950

BACKGROUND

Senescence marker protein-30 (SMP30) is expressed in the liver, kidney and submandibular gland. In the kidney, SMP30 localizes to the hepatocytes and renal proximal tubular epithelium. SMP30 expression levels increase during tissue maturation during development and decrease with aging in an androgen-independent fashion. SMP30 affects intracellular calcium homeostasis by modulating the activity of the plasma membrane calcium-pump. The effect of SMP30 on calcium levels appears to protect cells from apoptosis. The gene encoding human SMP30 maps to chromosome Xp11.23. The promoter sequence for the mouse SMP30 gene contains binding sites for unknown and known transcription factors including Sp1, AP2, CCAAT box, Lyf-1, and GATA-1.

CHROMOSOMAL LOCATION

Genetic locus: RGN (human) mapping to Xp11.23; Rgn (mouse) mapping to X A1.3.

SOURCE

SMP30 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SMP30 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-25950 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.

APPLICATIONS

SMP30 (K-18) is recommended for detection of SMP30 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SMP30 (K-18) is also recommended for detection of SMP30 in additional species, including canine.

Suitable for use as control antibody for SMP30 siRNA (h): sc-106902, SMP30 siRNA (m): sc-153635, SMP30 shRNA Plasmid (h): sc-106902-SH, SMP30 shRNA Plasmid (m): sc-153635-SH, SMP30 shRNA (h) Lentiviral Particles: sc-106902-V and SMP30 shRNA (m) Lentiviral Particles: sc-153635-V.

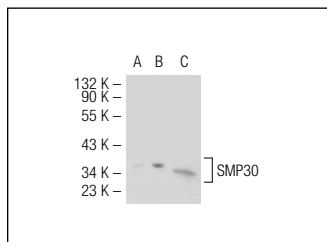
Molecular Weight of SMP30: 35 kDa.

Positive Controls: mouse liver extract: sc-2256 or SMP30 (h): 293T Lysate: sc-111590.

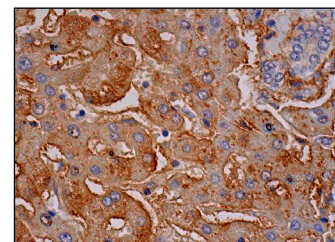
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



SMP30 (K-18): sc-25950. Western blot analysis of SMP30 expression in non-transfected 293T: sc-117752 (A) and human SMP30 transfected 293T: sc-111590 (B) whole cell lysates and mouse liver tissue extract (C).



SMP30 (K-18): sc-25950. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic and membrane staining of hepatocytes and hepatic sinusoids.

SELECT PRODUCT CITATIONS

1. Nejak-Bowen, K.N., et al. 2009. β-catenin regulates vitamin C biosynthesis and cell survival in murine liver. *J. Biol. Chem.* 284: 28115-28127.
2. Yew, T.L., et al. 2011. Knockdown of p21^{Cip1/Waf1} enhances proliferation, the expression of stemness markers, and osteogenic potential in human mesenchymal stem cells. *Aging Cell* 10: 349-361.

RESEARCH USE

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

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **SMP30 (E-11): sc-390098** or **SMP30 (H-4): sc-377184**, our highly recommended monoclonal alternatives to SMP30 (K-18).