

Sds22 (E-20): sc-162164

BACKGROUND

In eukaryotes, the phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions, including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the protein phosphatases. In general, the protein phosphatase 1 (PP1) holoenzyme is a trimeric complex composed of a regulatory subunit, a variable subunit and a catalytic subunit. Sds22, also known as PPP1R7 (protein phosphatase 1, regulatory (inhibitor) subunit 7), is a 360 amino acid protein that localizes to the nucleus and contains 10 LRR (leucine rich) repeats. Expressed in a variety of tissues, Sds22 functions as a regulatory subunit of the PP1 complex, suggesting a role in protein regulation throughout the cell. Multiple isoforms of Sds22 exist due to alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: PPP1R7 (human) mapping to 2q37.3; Ppp1r7 (mouse) mapping to 1 D.

SOURCE

Sds22 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sds22 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-162164 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

Sds22 (E-20) is recommended for detection of Sds22 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).

Sds22 (E-20) is also recommended for detection of Sds22 in additional species, including bovine.

Suitable for use as control antibody for Sds22 siRNA (h): sc-94837, Sds22 siRNA (m): sc-153290, Sds22 shRNA Plasmid (h): sc-94837-SH, Sds22 shRNA Plasmid (m): sc-153290-SH, Sds22 shRNA (h) Lentiviral Particles: sc-94837-V and Sds22 shRNA (m) Lentiviral Particles: sc-153290-V.

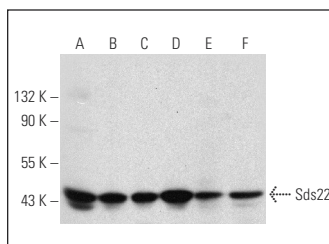
Molecular Weight of Sds22: 44 kDa.

Positive Controls: rat liver extract: sc-2395, K-562 nuclear extract: sc-2130 or IMR-32 nuclear extract: sc-2148.

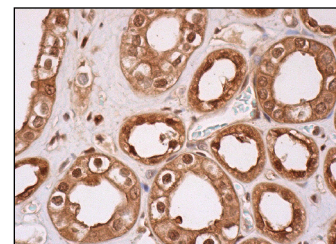
RECOMMENDED SECONDARY REAGENTS

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



Sds22 (E-20): sc-162164. Western blot analysis of Sds22 expression in c4 whole cell lysate (A) and PC-3 (B), K-562 (C) and IMR-32 (D) nuclear extracts and rat liver (E) and mouse liver (F) tissue extracts.



Sds22 (E-20): sc-162164. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic staining of cells in glomeruli.

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.



Try **Sds22 (E-10): sc-514830** or **Sds22 (B-8): sc-398865**, our highly recommended monoclonal alternatives to Sds22 (E-20).