SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein S5 (C-20): sc-169174

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of over 80 distinct ribosomal proteins. Mammalian ribosomal proteins are encoded by multigene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein S5, also known as RPS5, is a 204 amino acid component of the 40S complex. Localized to the cytoplasm, Ribosomal Protein S5 belongs to the S7P family of ribosomal proteins and functions in protein synthesis. Like most ribosomal proteins, Ribosomal Protein S5 exists as multiple processed pseudogenes that are scattered throughout the genome. Ribosomal Protein S5 is expressed at variable amounts in colorectal cancer cells, suggesting a possible role in carcinogenesis.

CHROMOSOMAL LOCATION

Genetic locus: RPS5 (human) mapping to 19q13.43; Rps5 (mouse) mapping to 7 A1.

SOURCE

Ribosomal Protein S5 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ribosomal Protein S5 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-169174 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein S5 (C-20) is recommended for detection of Ribosomal Protein S5 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); non cross-reactive with other Ribosomal Protein family members.

Ribosomal Protein S5 (C-20) is also recommended for detection of Ribosomal Protein S5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ribosomal Protein S5 siRNA (h): sc-97457, Ribosomal Protein S5 siRNA (m): sc-152951, Ribosomal Protein S5 shRNA Plasmid (h): sc-97457-SH, Ribosomal Protein S5 shRNA Plasmid (m): sc-152951-SH, Ribosomal Protein S5 shRNA (h) Lentiviral Particles: sc-97457-V and Ribosomal Protein S5 shRNA (m) Lentiviral Particles: sc-152951-V.

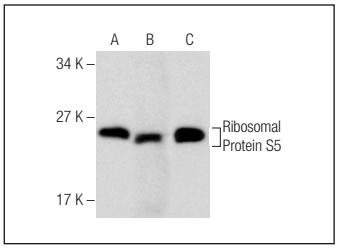
Molecular Weight of Ribosomal Protein S5: 23 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, HeLa whole cell lysate: sc-2200 or HT-1080 whole cell lysate.

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.

DATA



Ribosomal Protein S5 (C-20): sc-169174. Western blot analysis of Ribosomal Protein S5 expression in NIH/3T3 (**A**), HeLa (**B**) and HT-1080 (**C**) whole cell lysates.

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.

PROTOCOLS

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