SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein S16 (D-8): sc-518206

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. Ribosomal Protein S16, also known as RPS16, is a 146 amino acid cytoplasmic protein that belongs to the S9P ribosomal protein family. One of several components of the 40S subunit, Ribosomal Protein S16 may play a role in ribosome assembly and translation initiation. Elevated levels of Ribosomal Protein S16 may be associated with pancreatic and breast cancer, suggesting a possible role for Ribosomal Protein S16 in tumorigenesis. Like other mammalian ribosomal proteins, Ribosomal Protein S16 exists as multiple processed pseudogenes that are found throughout the genome.

REFERENCES

1. Batra, S.K., et al. 1991. Molecular cloning and sequence analysis of the human ribosomal protein S16. J. Biol. Chem. 266: 6830-6833.
2. Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. Biochem. Cell Biol. 73: 933-947.
3. Vladimirov, S.N., et al. 1996. Characterization of the human small-ribosomal-subunit proteins by N-terminal and internal sequencing, and mass spectrometry. Eur. J. Biochem. 239 144-149.
4. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.

CHROMOSOMAL LOCATION

Genetic locus: RPS16 (human) mapping to 19q13.2; Rps16 (mouse) mapping to 7 A3.

SOURCE

Ribosomal Protein S16 (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 122-145 of Ribosomal Protein S16 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ribosomal Protein S16 (D-8) is available conjugated to agarose (sc-518206 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518206 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518206 PE), fluorescein (sc-518206 FITC), Alexa Fluor® 488 (sc-518206 AF488), Alexa Fluor® 546 (sc-518206 AF546), Alexa Fluor® 594 (sc-518206 AF594) or Alexa Fluor® 647 (sc-518206 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518206 AF680) or Alexa Fluor® 790 (sc-518206 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Ribosomal Protein S16 (D-8) is recommended for detection of Ribosomal Protein S16 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Ribosomal Protein S16 siRNA (h): sc-97200, Ribosomal Protein S16 siRNA (m): sc-152937, Ribosomal Protein S16 shRNA Plasmid (h): sc-97200-SH, Ribosomal Protein S16 shRNA Plasmid (m): sc-152937-SH, Ribosomal Protein S16 shRNA (h) Lentiviral Particles: sc-97200-V and Ribosomal Protein S16 shRNA (m) Lentiviral Particles: sc-152937-V.

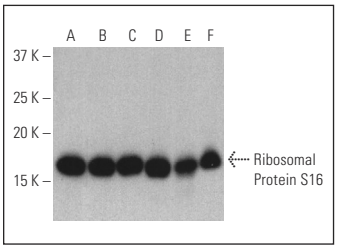
Molecular Weight of Ribosomal Protein S16: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or RT-4 whole cell lysate: sc-364257.

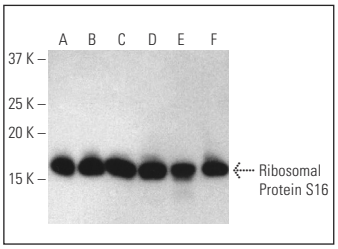
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Ribosomal Protein S16 (D-8): sc-518206. Western blot analysis of Ribosomal Protein S16 expression in HeLa (**A**), Jurkat (**B**), U-251-MG (**C**), RT-4 (**D**), NIH/3T3 (**E**) and PC-12 (**F**) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



Ribosomal Protein S16 (D-8): sc-518206. Western blot analysis of Ribosomal Protein S16 expression in HeLa (**A**), Jurkat (**B**), U-251-MG (**C**), RT-4 (**D**), NIH/3T3 (**E**) and PC-12 (**F**) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Ji, Y., et al. 2022. N6-methyladenosine modification of CIRCKRT17 initiated by METTL3 promotes osimertinib resistance of lung adenocarcinoma by EIF4A3 to enhance YAP1 stability. Cancers 14: 5582.

RESEARCH USE

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