

Ribosomal Protein S15a (G-17): sc-162101

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 S15a (RPS15A) is a 130 amino acid cytoplasmic protein that belongs to the Ribosomal Protein S8P family. The gene encoding Ribosomal Protein S15a maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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4. Chan, Y.L., et al. 1994. The primary structure of rat ribosomal protein S15a. *Biochem. Biophys. Res. Commun.* 200: 1498-1504.
5. Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. *Biochem. Cell Biol.* 73: 933-947.
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8. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
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CHROMOSOMAL LOCATION

Genetic locus: RPS15A (human) mapping to 16p12.3; Rps15a (mouse) mapping to 7 F2.

SOURCE

Ribosomal Protein S15a (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ribosomal Protein S15a of human origin.

RESEARCH USE

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

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-162101 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein S15a (G-17) is recommended for detection of Ribosomal Protein S15a of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Proteins.

Ribosomal Protein S15a (G-17) is also recommended for detection of Ribosomal Protein S15a in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein S15a siRNA (h): sc-93349, Ribosomal Protein S15a siRNA (m): sc-152936, Ribosomal Protein S15a shRNA Plasmid (h): sc-93349-SH, Ribosomal Protein S15a shRNA Plasmid (m): sc-152936-SH, Ribosomal Protein S15a shRNA (h) Lentiviral Particles: sc-93349-V and Ribosomal Protein S15a shRNA (m) Lentiviral Particles: sc-152936-V.

Molecular Weight of Ribosomal Protein S15a: 15 kDa.

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) 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.

STORAGE

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

PROTOCOLS

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