SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein S26 (G-15): sc-139280

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 S26 (RPS26), also known as S26 or DBA10, is a 115 amino acid protein that belongs to the Ribosomal Protein S26e family. The gene encoding Ribosomal Protein S26 maps to human chromosome 12q13.2, and when defective, may lead to the development of a congenital non-regenerative hypoplastic anemia known as Diamond-Blackfan anemia type 10 (DBA10). DBA10 typically becomes apparent during infancy, and is characterized by erythroblastopenia, macrocytic anemia and an increased risk of malignancy.

REFERENCES

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2. Filipenko, M.L., et al. 1994. Cloning cDNA of human S26 ribosomal protein and determination of its primary structure. Bioorg. Khim. 20: 644-649.
3. Wool, I.G., et al. 1995. Structure and evolution of mammalian ribosomal proteins. Biochem. Cell Biol. 73: 933-947.
4. Filipenko, M.L., et al. 1998. Isolation, structural analysis and mapping of the functional gene of human ribosomal protein S26. Gene 211: 287-292.
5. Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. Genome Res. 8: 509-523.
6. Doherty, L., et al. 2010. Ribosomal protein genes RPS10 and RPS26 are commonly mutated in Diamond-Blackfan anemia. Am. J. Hum. Genet. 86: 222-228.
7. Cmejla, R., et al. 2011. Can mutations in the ribosomal protein S26 (RPS26) gene lead to Klippel-Feil syndrome in Diamond-Blackfan anemia patients? An update from the Czech Diamond-Blackfan anemia registry. Blood Cells Mol. Dis. 46: 300-301.
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CHROMOSOMAL LOCATION

Genetic locus: RPS26 (human) mapping to 12q13.2; Rps26 (mouse) mapping to 10 D3.

SOURCE

Ribosomal Protein S26 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ribosomal Protein S26 of human origin.

STORAGE

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

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-139280 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein S26 (G-15) is recommended for detection of Ribosomal Protein S26 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 Protein family members.

Ribosomal Protein S26 (G-15) is also recommended for detection of Ribosomal Protein S26 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ribosomal Protein S26 siRNA (h): sc-106510, Ribosomal Protein S26 siRNA (m): sc-152945, Ribosomal Protein S26 shRNA Plasmid (h): sc-106510-SH, Ribosomal Protein S26 shRNA Plasmid (m): sc-152945-SH, Ribosomal Protein S26 shRNA (h) Lentiviral Particles: sc-106510-V and Ribosomal Protein S26 shRNA (m) Lentiviral Particles: sc-152945-V.

Molecular Weight of Ribosomal Protein S26: 13 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.

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.