SANTA CRUZ BIOTECHNOLOGY, INC.

Ribosomal Protein L27 (D-13): sc-137716



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 L27, also known as RPL27, is a 136 amino acid protein belonging to the ribosomal protein L27e family exists as a component of the 60S subunit, possibly playing a role in protein translation. Like most ribosomal proteins, Ribosomal Protein L27 exists as multiple processed pseudogenes that are scattered throughout the genome. Considered a novel candidate housekeeping gene, the gene encoding Ribosomal Protein L27 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

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- 6. Ueda, M., et al. 2006. Promoter shuffling at a nuclear gene for mitochondrial RPL27. Involvement of interchromosome and subsequent intrachromosome recombinations. Plant Physiol. 141: 702-710.
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CHROMOSOMAL LOCATION

Genetic locus: RPL27 (human) mapping to 17g21.31; Rpl27 (mouse) mapping to 11 D.

SOURCE

Ribosomal Protein L27 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ribosomal Protein L27 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137716 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein L27 (D-13) is recommended for detection of Ribosomal Protein L27 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 L family members.

Ribosomal Protein L27 (D-13) is also recommended for detection of Ribosomal Protein L27 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein L27 siRNA (h): sc-94077, Ribosomal Protein L27 siRNA (m): sc-152906, Ribosomal Protein L27 shRNA Plasmid (h): sc-94077-SH, Ribosomal Protein L27 shRNA Plasmid (m): sc-152906-SH, Ribosomal Protein L27 shRNA (h) Lentiviral Particles: sc-94077-V and Ribosomal Protein L27 shRNA (m) Lentiviral Particles: sc-152906-V.

Molecular Weight of Ribosomal Protein L27: 18 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.

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.