

# Ribosomal Protein L7A (D-15): sc-79041

## 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 multi-gene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. Ribosomal Protein L7A, also known as RPL7A or SURF-3, is a 266 amino acid protein that interacts with select nuclear hormone receptors, such as TR (thyroid hormone receptor), and, via this interaction, is able to inhibit receptor function. The gene encoding Ribosomal Protein L7A maps to chromosome 9 and is subject to a recombination event which activates the Trk (tyrosine kinase receptor) oncogene and may play a role in oncogenesis. Like most ribosomal proteins, Ribosomal Protein L7A exists as multiple processed pseudogenes that are scattered throughout the genome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RPL7A (human) mapping to 9q34.2; Rpl7a (mouse) mapping to 2 A3.

## STORAGE

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

## SOURCE

Ribosomal Protein L7A (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ribosomal Protein L7A 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-79041 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Ribosomal Protein L7A (D-15) is recommended for detection of Ribosomal Protein L7A 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).

Ribosomal Protein L7A (D-15) is also recommended for detection of Ribosomal Protein L7A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein L7A siRNA (h): sc-76433, RPL7A siRNA (m): sc-153108, Ribosomal Protein L7A shRNA Plasmid (h): sc-76433-SH, RPL7A shRNA Plasmid (m): sc-153108-SH, Ribosomal Protein L7A shRNA (h) Lentiviral Particles: sc-76433-V and RPL7A shRNA (m) Lentiviral Particles: sc-153108-V.

Molecular Weight of Ribosomal Protein L7A: 32 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.