

PRPF38A (S-15): sc-162045

BACKGROUND

PRPF38A (pre-mRNA-splicing factor 38A) is a 312 amino acid nuclear protein that is likely required for pre-mRNA splicing. There are two isoforms of PRPF38A that are produced as a result of alternative splicing events. The gene encoding PRPF38A maps to human chromosome 1, the largest human chromosome which spans about 260 million base pairs and makes up 8% of the human genome. There are about 3,000 genes on chromosome 1 and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRPF38A (human) mapping to 1p32.3; Prpf38a (mouse) mapping to 4 C7.

SOURCE

PRPF38A (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRPF38A 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-162045 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRPF38A (S-15) is recommended for detection of PRPF38A 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 PRPF38B.

PRPF38A (S-15) is also recommended for detection of PRPF38A in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for PRPF38A siRNA (h): sc-88607, PRPF38A siRNA (m): sc-152494, PRPF38A shRNA Plasmid (h): sc-88607-SH, PRPF38A shRNA Plasmid (m): sc-152494-SH, PRPF38A shRNA (h) Lentiviral Particles: sc-88607-V and PRPF38A shRNA (m) Lentiviral Particles: sc-152494-V.

Molecular Weight of PRPF38A: 37 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, K-562 nuclear extract: sc-2130 or SK-N-MC nuclear extract: sc-2154.

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.