

PRPF4 (G-17): sc-163264

BACKGROUND

PRPF4, also known as U4/U6 snRNP 60 kDa protein or WD splicing factor Prp4, is a 522 amino acid protein containing 7 WD repeats. Localized to the nucleus, PRPF4 colocalizes with spliceosomal snRNPs and is involved in pre-RNA splicing. PRPF4 is part of a heteromeric complex which interacts with U4/U5/U6 tri-snRNP complex and is stable in the absence of RNA. PRPF4 interacts directly with PPIH, PRPF18 and PRPF3. The gene that encodes PRPF4 maps to human chromosome 9, which consists of about 145 million bases and encodes nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of Bcr-Abl fusion protein often found in leukemias.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRPF4 (human) mapping to 9q32; Prpf4 (mouse) mapping to 4 B3.

SOURCE

PRPF4 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRPF4 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-163264 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRPF4 (G-17) is recommended for detection of PRPF4 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 PRPF family members.

PRPF4 (G-17) is also recommended for detection of PRPF4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PRPF4 siRNA (h): sc-92543, PRPF4 siRNA (m): sc-152497, PRPF4 shRNA Plasmid (h): sc-92543-SH, PRPF4 shRNA Plasmid (m): sc-152497-SH, PRPF4 shRNA (h) Lentiviral Particles: sc-92543-V and PRPF4 shRNA (m) Lentiviral Particles: sc-152497-V.

Molecular Weight of PRPF4 isoforms: 58 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.