

PAPD4 (N-15): sc-168897

BACKGROUND

PAPD4 (PAP associated domain containing 4), also known as poly(A) RNA polymerase GLD2 or TUTase 2 (terminal uridylyltransferase 2), is a 484 amino acid poly(A) RNA polymerase that adds AMP to the 3'-end of RNA, forming a poly(A) tail. Localizing to both cytoplasm and nucleus, PAPD4 exists as two alternatively spliced isoforms and contains one PAP-associated domain. PAPD4 is a member of the DNA polymerase type-B-like family and GLD2 subfamily, and is expressed in medulla, hippocampus and cerebellum. PAPD4 interacts with PABP, CPEB, CPEB2 and CPSF1, and is encoded by a gene that maps to human chromosome 5q14.1. Human chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PAPD4 (human) mapping to 5q14.1; Papd4 (mouse) mapping to 13 C3.

SOURCE

PAPD4 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PAPD4 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-168897 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PAPD4 (N-15) is recommended for detection of PAPD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 PAPD1 or PAPD5.

PAPD4 (N-15) is also recommended for detection of PAPD4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PAPD4 siRNA (h): sc-91706, PAPD4 siRNA (m): sc-152014, PAPD4 shRNA Plasmid (h): sc-91706-SH, PAPD4 shRNA Plasmid (m): sc-152014-SH, PAPD4 shRNA (h) Lentiviral Particles: sc-91706-V and PAPD4 shRNA (m) Lentiviral Particles: sc-152014-V.

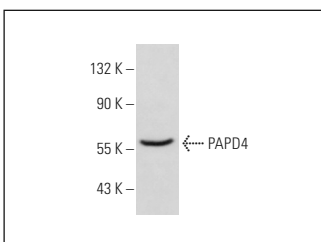
Molecular Weight of PAPD4: 56 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



PAPD4 (N-15): sc-168897. Western blot analysis of PAPD4 expression in Hep G2 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.