

PAP- α (h): 293 Lysate: sc-110765

BACKGROUND

Polyadenylation of the 3' ends of eukaryotic mRNAs is a key event that takes place in the nucleus during maturation of mRNA. The reaction occurs in two distinct steps: endoribonucleolytic cleavage of the pre-mRNA at the poly(A) site, followed by synthesis of the poly(A) tail at the 3' end of the upstream cleavage product. The poly(A) polymerase (PAP) is required for the adenosine addition reaction. Western blot analysis reveals three PAPs, namely PAP- α , PAP- β and PAP- γ , demonstrating different molecular masses in HeLa cell extracts. The amino-terminal region of PAP is required for nonspecific polymerase activity, while both the amino- and carboxy-termini are required for specific polymerase activity. Additionally, PAP contains a functional ribonucleoprotein-type RNA binding domain (RBD) that is responsible for primer binding.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PAPOLA (human) mapping to 14q32.2.

PRODUCT

PAP- α (h): 293 Lysate represents a lysate of human PAP- α transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PAP- α (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive PAP- α antibodies. Recommended use: 10-20 μ l per lane.

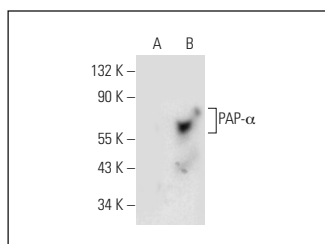
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PAP- α / β / γ (D-1): sc-365607 is recommended as a positive control antibody for Western Blot analysis of enhanced human PAP- α expression in PAP- α transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG λ BP-HRP: sc-516132 or m-IgG λ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PAP- α / β / γ (D-1): sc-365607. Western blot analysis of PAP- α expression in non-transfected: sc-110760 (A) and human PAP- α transfected: sc-110765 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.