

PRIM2A (L-21): sc-133926

BACKGROUND

In eukaryotic cells, the replication of DNA is carried out by a variety of proteins and requires a complex chromosomal replication structure, of which POLA2 (DNA polymerase α) and DNA primases (PRIMs) are key components. PRIM2A (primase, DNA, polypeptide 2A), also known as p58, is a 509 amino acid protein that exists as a heterodimer with PRIM1, another DNA primase. Together, PRIM2A and PRIM1 function to synthesize small RNA primers that are required for the proper activity of Okazaki fragments during replication of the DNA lagging strand. Multiple isoforms of PRIM2A exist due to alternative splicing events. The gene encoding PRIM2A maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRIM2 (human) mapping to 6p11.2.

SOURCE

PRIM2A (L-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic PRIM2A peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

PRIM2A (L-21) is recommended for detection of PRIM2A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PRIM2A siRNA (h): sc-95096, PRIM2A shRNA Plasmid (h): sc-95096-SH and PRIM2A shRNA (h) Lentiviral Particles: sc-95096-V.

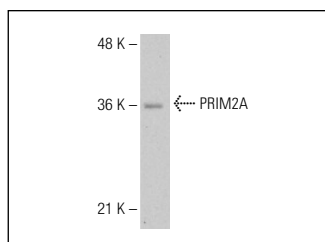
Molecular Weight of PRIM2A isoforms: 58/19 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



PRIM2A (L-21): sc-133926. Western blot analysis of PRIM2A expression in Hep G2 whole cell lysate.

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.