

TOPORS (H-127): sc-292009

BACKGROUND

TOPORS (topoisomerase I binding, arginine/serine-rich), also known as LUN, RP31, P53BP3 or TP53BPL, is a 1,045 amino acid protein that contains one RING-type zinc finger and localizes to discrete nuclear foci. Expressed in a variety of tissues with highest expression in testis, TOPORS functions as a ubiquitin E3 ligase that, via its RING domain, can ubiquitinate proteins such as p53, thereby targeting them for proteasomal degradation. TOPORS expression can be induced by genotoxic agents (compounds that damage DNA), such as camptothecin and cisplatin, suggesting an important role for TOPORS in DNA damage repair pathways. In addition, TOPORS levels are decreased in lung and colon cancers, implicating TOPORS as a possible tumor suppressor. Defects in the gene encoding TOPORS are the cause of retinitis pigmentosa type 31 (RP31), a degenerative disease characterized by a loss of peripheral and, eventually, central vision.

REFERENCES

1. Zhou, R., et al. 1999. Identification of a novel gene encoding a p53-associated protein. *Gene* 235: 93-101.
2. Haluska, P., et al. 1999. Interaction between human topoisomerase I and a novel RING finger/arginine-serine protein. *Nucleic Acids Res.* 27: 2538-2544.
3. Chu, D., et al. 2001. Cloning and characterization of LUN, a novel ring finger protein that is highly expressed in lung and specifically binds to a palindromic sequence. *J. Biol. Chem.* 276: 14004-14013.
4. Rasheed, Z.A., et al. 2002. The topoisomerase I-binding RING protein, topors, is associated with promyelocytic leukemia nuclear bodies. *Exp. Cell Res.* 277: 152-160.

CHROMOSOMAL LOCATION

Genetic locus: TOPORS (human) mapping to 9p21.1; Topors (mouse) mapping to 4 A5.

SOURCE

TOPORS (H-127) is a rabbit polyclonal antibody raised against amino acids 251-377 mapping within an internal region of TOPORS 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292009 X, 200 µg/0.1 ml.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

TOPORS (H-127) is recommended for detection of TOPORS 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).

TOPORS (H-127) is also recommended for detection of TOPORS in additional species, including equine, canine, bovine and porcine.

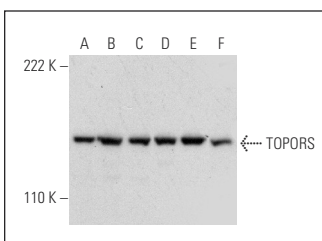
Suitable for use as control antibody for TOPORS siRNA (h): sc-92519, TOPORS siRNA (m): sc-154555, TOPORS shRNA Plasmid (h): sc-92519-SH, TOPORS shRNA Plasmid (m): sc-154555-SH, TOPORS shRNA (h) Lentiviral Particles: sc-92519-V and TOPORS shRNA (m) Lentiviral Particles: sc-154555-V.

TOPORS (H-127) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TOPORS: 119 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, IMR-32 nuclear extract: sc-2148 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

DATA



TOPORS (H-127): sc-292009. Western blot analysis of TOPORS expression in HeLa (A), Jurkat (B), K-562 (C), HEL 92.1.7 (D) and IMR-32 (E) nuclear extracts and NTERA-2 cl.D1 whole cell lysate (F).

RESEARCH USE

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

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Try **TOPORS (Y-30): sc-101182**, our highly recommended monoclonal alternative to TOPORS (H-127).