

NOL7 (P-16): sc-168771

BACKGROUND

NOL7 (nucleolar protein 7), also known as NOP27 (nucleolar protein of 27 kDa), PQBP3 (polyglutamine binding protein 3) or RARG-1 (retinoic acid repressible protein), is a 257 amino acid protein that exists as 2 alternatively spliced isoforms. Although it is expressed in numerous tissues, NOL7 is particularly prevalent in adrenal gland, thyroid gland, heart and skeletal muscle. The gene that encodes NOL7 consists of approximately 17,413 bases and maps to human chromosome 6p23. With 170 million base pairs, chromosome 6 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

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Andersen, J.S., et al. 2002. Directed proteomic analysis of the human nucleolus. *Curr. Biol.* 12: 1-11.
3. Scherl, A., et al. 2002. Functional proteomic analysis of human nucleolus. *Mol. Biol. Cell* 13: 4100-4109.
4. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
5. Hasina, R., et al. 2006. NOL7 is a nucleolar candidate tumor suppressor gene in cervical cancer that modulates the angiogenic phenotype. *Oncogene* 25: 588-598.
6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611533. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: NOL7 (human) mapping to 6p23; Nol7 (mouse) mapping to 13 A4.

SOURCE

NOL7 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NOL7 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-168771 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

NOL7 (P-16) is recommended for detection of NOL7 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 other NOL family members.

NOL7 (P-16) is also recommended for detection of NOL7 in additional species, including equine and canine.

Suitable for use as control antibody for NOL7 siRNA (h): sc-95562, NOL7 siRNA (m): sc-150025, NOL7 shRNA Plasmid (h): sc-95562-SH, NOL7 shRNA Plasmid (m): sc-150025-SH, NOL7 shRNA (h) Lentiviral Particles: sc-95562-V and NOL7 shRNA (m) Lentiviral Particles: sc-150025-V.

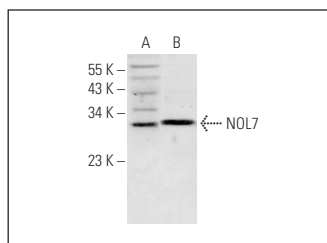
Molecular Weight of NOL7 isoforms: 29/16 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or RAW 264.7 whole cell lysate: sc-2211.

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



NOL7 (P-16): sc-168771. Western blot analysis of NOL7 expression in K-562 (A) and RAW 264.7 (B) whole cell lysates.

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.