

REXO2 (P-14): sc-109425

BACKGROUND

Proper DNA and RNA metabolism requires nucleases which function in DNA replication, recombination and repair, as well as in RNA processing and degradation events. REXO2 (RNA exonuclease 2), also called RFN or SFN, is the human homolog of the *E. coli* exonuclease ORN. Functioning as a 3'-to-5' exonuclease, REXO2 degrades single-stranded RNA or DNA and, based on its similarity with ORN, may be involved in cellular responses to DNA-damaging agents. Additionally, REXO2 is implicated in cellular nucleotide recycling and can use manganese as a cofactor. Two isoforms of REXO2 exist due to alternative splicing events. Isoform 1 is localized to the mitochondria, while isoform 2 is localized to the nucleus.

REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607149. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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5. Young Park, A., Elvin, C.M., Hamdan, S.M., Wood, R.J., Liyou, N.E., Hamwood, T.E., Jennings, P.A. and Dixon, N.E. 2007. Hydrolysis of the 5'-p-nitrophenyl ester of TMP by oligoribonucleases (ORN) from *Escherichia coli*, *Mycobacterium smegmatis*, and human. *Protein Expr. Purif.* 57: 180-187.

CHROMOSOMAL LOCATION

Genetic locus: REXO2 (human) mapping to 11q23.2; Rexo2 (mouse) mapping to 9 A5.3.

SOURCE

REXO2 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of REXO2 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-109425 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

REXO2 (P-14) is recommended for detection of REXO2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 family members REXO1 or REXO4.

REXO2 (P-14) is also recommended for detection of REXO2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for REXO2 siRNA (h): sc-96458, REXO2 siRNA (m): sc-152820, REXO2 shRNA Plasmid (h): sc-96458-SH, REXO2 shRNA Plasmid (m): sc-152820-SH, REXO2 shRNA (h) Lentiviral Particles: sc-96458-V and REXO2 shRNA (m) Lentiviral Particles: sc-152820-V.

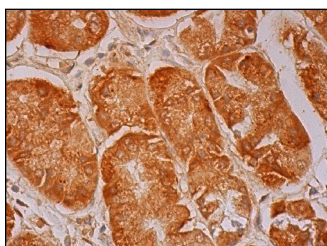
Molecular Weight of REXO2: 24 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Hs 181 Tes whole cell lysate: sc-364779.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



REXO2 (P-14): sc-109425. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic and nuclear staining of glandular cells.

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.