

# REXO4 (E-14): sc-107084

## BACKGROUND

Proper DNA and RNA metabolism require nucleases which function in DNA replication, recombination and repair, as well as in RNA processing and degradation events. REXO4 (REX4, RNA exonuclease 4 homolog), also known as REX4, XPMC2 or XPMC2H, is a 422 amino acid nucleolar protein containing an exonuclease domain. REXO4 interacts with ER $\alpha$  and ER $\beta$ , however, this interaction is reversed by estrogen and augmented by Tamoxifen treatment. Expressed as two alternatively spliced isoforms, REXO4 is encoded by a gene located on human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 602930. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Wang, C., Francis, R., Harirchian, S., Batlle, D., Mayhew, B., Bassett, M., Rainey, W.E. and Pestell, R.G. 2000. The application of high density microarray for analysis of mitogenic signaling and cell-cycle in the adrenal. *Endocr. Res.* 26: 807-823.
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## CHROMOSOMAL LOCATION

Genetic locus: REXO4 (human) mapping to 9q34.2; Rexo4 (mouse) mapping to 2 A3.

## SOURCE

REXO4 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of REXO4 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107084 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4 $^{\circ}$  C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

REXO4 (E-14) is recommended for detection of REXO4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

REXO4 (E-14) is also recommended for detection of REXO4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for REXO4 siRNA (h): sc-92768, REXO4 siRNA (m): sc-152821, REXO4 shRNA Plasmid (h): sc-92768-SH, REXO4 shRNA Plasmid (m): sc-152821-SH, REXO4 shRNA (h) Lentiviral Particles: sc-92768-V and REXO4 shRNA (m) Lentiviral Particles: sc-152821-V.

Molecular Weight of (predicted) REXO4: 47 kDa.

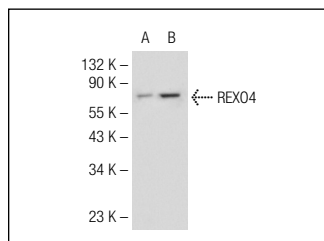
Molecular Weight of (observed) REXO4: 71 kDa.

Positive Controls: REXO4 (h2): 293 Lysate: sc-173398.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



REXO4 (E-14): sc-107084. Western blot analysis of REXO4 expression in non-transfected: sc-110760 (A) and human REXO4 transfected: sc-173398 (B) 293 whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.