

# DENR (N-16): sc-323784

## BACKGROUND

DENR (density-regulated protein), also designated DRP or smooth muscle cell-associated protein 3 (SMAP-3), is a 198 amino acid protein whose expression increases when cells are present in high densities. It has also been shown that DENR expression does not increase during growth arrest. DENR is found in a variety of tissues with highest levels present in skeletal and cardiac muscle. DENR was also found at higher levels in cells expressing the neu proto-oncogene. DENR contains one SUI1 domain and interacts with MCTS1. The SUI1 domain contains sequence similarity to the budding yeast protein SUI1, which is a translation-initiation factor that directs the ribosome to the appropriate translation start site.

## REFERENCES

1. Deyo, J.E., Chiao, P.J. and Tainsky, M.A. 1998. drp, a novel protein expressed at high cell density but not during growth arrest. *DNA Cell Biol.* 17: 437-447.
2. Oh, J.J., Grosshans, D.R., Wong, S.G. and Slamon, D.J. 1999. Identification of differentially expressed genes associated with HER-2/neu overexpression in human breast cancer cells. *Nucleic Acids Res.* 27: 4008-4017.
3. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 604550. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Reinert, L.S., Shi, B., Nandi, S., Mazan-Mamczarz, K., Vitolo, M., Bachman, K.E., He, H. and Gartenhaus, R.B. 2006. MCT-1 protein interacts with the cap complex and modulates messenger RNA translational profiles. *Cancer Res.* 66: 8994-9001.
5. Mazan-Mamczarz, K. and Gartenhaus, R.B. 2007. Post-transcriptional control of the MCT-1-associated protein DENR/DRP by RNA-binding protein AUF1. *Cancer Genomics Proteomics* 4: 233-239.

## CHROMOSOMAL LOCATION

Genetic locus: DENR (human) mapping to 12q24.31; Denr (mouse) mapping to 5 F.

## SOURCE

DENR (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DENR 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-323784 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

DENR (N-16) is recommended for detection of DENR of mouse 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).

Suitable for use as control antibody for DENR siRNA (h): sc-95769, DENR siRNA (m): sc-143005, DENR shRNA Plasmid (h): sc-95769-SH, DENR shRNA Plasmid (m): sc-143005-SH, DENR shRNA (h) Lentiviral Particles: sc-95769-V and DENR shRNA (m) Lentiviral Particles: sc-143005-V.

Molecular Weight (predicted) of DENR: 22 kDa.

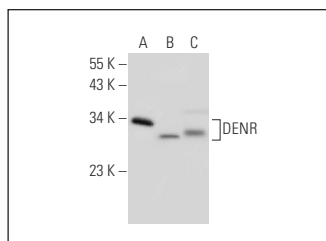
Molecular Weight (observed) of DENR: 27-31 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HEK293 whole cell lysate: sc-45136 or K-562 whole cell lysate: sc-2203.

## 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



DENR (N-16): sc-323784. Western blot analysis of DENR expression in K-562 (A), HEK293 (B) and MCF7 (C) 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.