

RSL1D1 (E-12): sc-376302

BACKGROUND

RSL1D1 (ribosomal L1 domain containing 1), also known as CATX-11 (cellular senescence-inhibited gene protein), PBK1, L12 or CSIG, is a 490 amino acid nuclear protein that belongs to the ribosomal protein L1P family. Expressed in placenta, RSL1D1 contains many phosphorylated amino acid residues and is encoded by a gene that maps to human chromosome 16p13.13. Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias.

REFERENCES

- Baraitser, M., et al. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. *Clin. Genet.* 23: 318-320.
- Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. *Am. J. Hum. Genet.* 52: 249-254.
- Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/Kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
- Kuhlenbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. *Neurology* 58: 1273-1276.
- Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.

CHROMOSOMAL LOCATION

Genetic locus: RSL1D1 (human) mapping to 16p13.13; Rsl1d1 (mouse) mapping to 16 A1.

SOURCE

RSL1D1 (E-12) is a mouse monoclonal antibody raised against amino acids 1-240 mapping at the N-terminus of RSL1D1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RSL1D1 (E-12) is available conjugated to agarose (sc-376302 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376302 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376302 PE), fluorescein (sc-376302 FITC), Alexa Fluor® 488 (sc-376302 AF488), Alexa Fluor® 546 (sc-376302 AF546), Alexa Fluor® 594 (sc-376302 AF594) or Alexa Fluor® 647 (sc-376302 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376302 AF680) or Alexa Fluor® 790 (sc-376302 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

RSL1D1 (E-12) is recommended for detection of RSL1D1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 RSL1D1 siRNA (h): sc-93449, RSL1D1 siRNA (m): sc-153144, RSL1D1 shRNA Plasmid (h): sc-93449-SH, RSL1D1 shRNA Plasmid (m): sc-153144-SH, RSL1D1 shRNA (h) Lentiviral Particles: sc-93449-V and RSL1D1 shRNA (m) Lentiviral Particles: sc-153144-V.

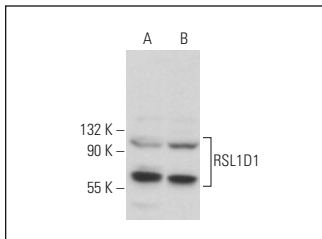
Molecular Weight of RSL1D1: 55 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or K-562 whole cell lysate: sc-2203.

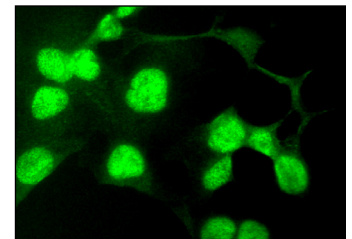
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RSL1D1 (E-12): sc-376302. Western blot analysis of RSL1D1 expression in K-562 (A) and A-431 (B) whole cell lysates.



RSL1D1 (E-12): sc-376302. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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