SANTA CRUZ BIOTECHNOLOGY, INC.

RSPRY1 (C-8): sc-514813

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RSPRY1 (RING finger and SPRY domain containing 1) is a 576 amino acid secreted protein that contains one RING-type zinc finger and a B30.2/SPRY domain. Existing as two alternatively spliced isoforms, RSPRY1 is encoded by a gene that maps to human chromosome 16q13. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. 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, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

1. Baraitser, M. and Preece, M.A. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
2. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
3. Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. Curr. Opin. Struct. Biol. 6: 395-401.
4. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. Proc. Natl. Acad. Sci. USA 96: 11364-11369.
5. 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.

CHROMOSOMAL LOCATION

Genetic locus: RSPRY1 (human) mapping to 16q13; Rspry1 (mouse) mapping to 8 C5.

SOURCE

RSPRY1 (C-8) is a mouse monoclonal antibody raised against amino acids 165-313 mapping within an internal region of RSPRY1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RSPRY1 (C-8) is available conjugated to agarose (sc-514813 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514813 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514813 PE), fluorescein (sc-514813 FITC), Alexa Fluor® 488 (sc-514813 AF488), Alexa Fluor® 546 (sc-514813 AF546), Alexa Fluor® 594 (sc-514813 AF594) or Alexa Fluor® 647 (sc-514813 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514813 AF680) or Alexa Fluor® 790 (sc-514813 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

RSPRY1 (C-8) is recommended for detection of RSPRY1 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 RSPRY1 siRNA (h): sc-93212, RSPRY1 siRNA (m): sc-153159, RSPRY1 shRNA Plasmid (h): sc-93212-SH, RSPRY1 shRNA Plasmid (m): sc-153159-SH, RSPRY1 shRNA (h) Lentiviral Particles: sc-93212-V and RSPRY1 shRNA (m) Lentiviral Particles: sc-153159-V.

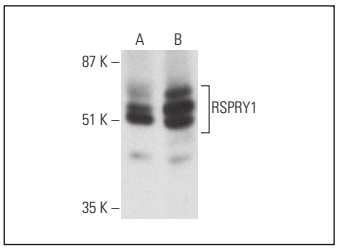
Molecular Weight of RSPRY1 isoforms: 64/13 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, human placenta extract: sc-363772 or human liver extract: sc-363766.

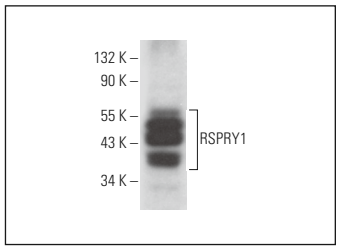
RECOMMENDED SUPPORT REAGENTS

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



RSPRY1 (C-8): sc-514813. Western blot analysis of RSPRY1 expression in human placenta (**A**) and human liver (**B**) tissue extracts.



RSPRY1 (C-8): sc-514813. Western blot analysis of RSPRY1 expression in Hep G2 whole cell lysate.

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.