# SANTA CRUZ BIOTECHNOLOGY, INC.

# RRP7A (N-12): sc-86108



BACKGROUND

CGI-96, also known as RRP7A (ribosomal RNA processing 7 homolog A), is a 280 amino acid protein that contains one RRM domain and is encoded by a gene which maps to human chromosome 22. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

#### REFERENCES

- Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. Chromosome 22. Genet. Test. 2: 89-97.
- Lai, C.H., Chou, C.Y., Ch'ang, L.Y., Liu, C.S. and Lin, W. 2000. Identification of novel human genes evolutionarily conserved in *Caenorhabditis elegans* by comparative proteomics. Genome Res. 10: 703-713.
- Andersen, J.S., Lyon, C.E., Fox, A.H., Leung, A.K., Lam, Y.W., Steen, H., Mann, M. and Lamond, A.I. 2002. Directed proteomic analysis of the human nucleolus. Curr. Biol. 12: 1-11.
- Tsilchorozidou, T., Menko, F.H., Lalloo, F., Kidd, A., De Silva, R., Thomas, H., Smith, P., Malcolmson, A., Dore, J., Madan, K., Brown, A., Yovos, J.G., Tsaligopoulos, M., Vogiatzis, N., Baser, M.E., Wallace, A.J. and Evans, D.G. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. J. Med. Genet. 41: 529-534.
- Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.

## CHROMOSOMAL LOCATION

Genetic locus: RRP7A (human) mapping to 22q13.2.

## SOURCE

RRP7A (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of RRP7A of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# PROTOCOLS

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

#### APPLICATIONS

RRP7A (N-12) is recommended for detection of RRP7A of 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).

Suitable for use as control antibody for RRP7A siRNA (h): sc-72880, RRP7A shRNA Plasmid (h): sc-72880-SH and RRP7A shRNA (h) Lentiviral Particles: sc-72880-V.

Molecular Weight (predicted) of RRP7A: 32 kDa.

Molecular Weight (observed) of RRP7A: 39 kDa.

Positive Controls: TE671 cell lysate: sc-2416 or RRP7A (h): 293T Lysate: sc-112425.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA





RRP7A (N-12): sc-86108. Western blot analysis of RRP7A expression in non-transfected 293T: sc-11752 (A), human RRP7A transfected 293T: sc-112425 (B) and TE671 (C) whole cell lysates. RRP7A (N-12): sc-86108. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear and cytoplasmic localization.

#### **RESEARCH USE**

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

