

# RRP7A (B-4): sc-377210

## BACKGROUND

RRP7A (ribosomal RNA processing 7 homolog A), also known as CGI-96 or gastric cancer antigen Zg14, is a 280 amino acid protein that contains one RRM domain. RRP7A is encoded by a gene that 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

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
2. Lai, C.H., et al. 2000. Identification of novel human genes evolutionarily conserved in *Caenorhabditis elegans* by comparative proteomics. *Genome Res.* 10: 703-713.
3. Andersen, J.S., et al. 2002. Directed proteomic analysis of the human nucleolus. *Curr. Biol.* 12: 1-11.
4. Tsilchorzidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. *J. Med. Genet.* 41: 529-534.
5. 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 (B-4) is a mouse monoclonal antibody raised against amino acids 1-280 representing full length RRP7A of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-377210 X, 200 µg/0.1 ml.

RRP7A (B-4) is available conjugated to agarose (sc-377210 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377210 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377210 PE), fluorescein (sc-377210 FITC), Alexa Fluor® 488 (sc-377210 AF488), Alexa Fluor® 546 (sc-377210 AF546), Alexa Fluor® 594 (sc-377210 AF594) or Alexa Fluor® 647 (sc-377210 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377210 AF680) or Alexa Fluor® 790 (sc-377210 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## STORAGE

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

## APPLICATIONS

RRP7A (B-4) is recommended for detection of RRP7A of 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), immunohistochemistry (including paraffin-embedded sections) (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.

RRP7A (B-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of RRP7A: 32 kDa.

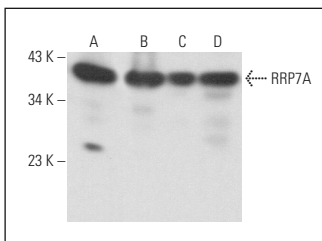
Molecular Weight (observed) of RRP7A: 39 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or HUV-EC-C whole cell lysate: sc-364180.

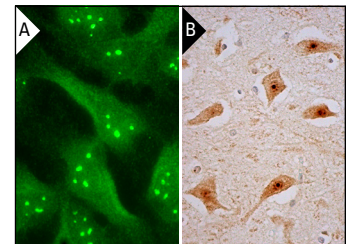
## RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



RRP7A (B-4): sc-377210. Western blot analysis of RRP7A expression in A-431 (A), HUV-EC-C (B), TK-1 (C) and SP2/O (D) whole cell lysates.



RRP7A (B-4): sc-377210. Immunofluorescence staining of methanol-fixed HeLa cells showing nucleolar, nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing nucleolar, nuclear and cytoplasmic staining of neuronal cells (B).

## RESEARCH USE

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