SANTA CRUZ BIOTECHNOLOGY, INC.

RFPL3 (T-25): sc-133955

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RFPL1, RFPL2 and RFPL3 (ret finger protein-like 1, 2 and 3, respectively), exist as a cluster of genes mapping to human chromosome 22q12.3, sharing 95%-96% identity. RFPL1, 2 and 3, are thought to contribute to neocortex organization and size in primates, and show high expression in fetal neocortex as well as embryonic stem-cell neurogenesis. Each of the 3 RFPL genes encodes 2 exons giving rise to a putative RING-like motifs and B30-2 domains. RFPL1, also known as RNF78 or MGC132428, is a 317 amino acid protein known to have high expression in prostate with lower expression in adult brain, fetal liver and fetal kidney. RFPL2, or RNF79, is 378 amino acids long and is also highly expressed in prostate with lower expression in fetal kidney and fetal liver. As a result of alternative splicing, three isoforms of RFPL2 exist. The RFPL3 protein is 371 amino acids long and may have been emerged due to intrachromosomal duplication.

REFERENCES

1. Seroussi, E., Kedra, D., Pan, H.Q., Peyrard, M., Schwartz, C., Scambler, P., Donnai, D., Roe, B.A. and Dumanski, J.P. 1999. Duplications on human chromosome 22 reveal a novel Ret Finger Protein-like gene family with sense and endogenous antisense transcripts. Genome Res. 9: 803-814.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605970OMIM: 605970. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Bonnefont, J., Nikolaev, S.I., Perrier, A.L., Guo, S., Cartier, L., Sorce, S., Laforge, T., Aubry, L., Khaitovich, P., Peschanski, M., Antonarakis, S.E. and Krause, K.H. 2008. Evolutionary forces shape the human RFPL1, 2, 3 genes toward a role in neocortex development. Am. J. Hum. Genet. 83: 208-218.

CHROMOSOMAL LOCATION

Genetic locus: RFPL3 (human) mapping to 22q12.3.

SOURCE

RFPL3 (T-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic RFPL3 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

RFPL3 (T-25) is recommended for detection of RFPL3 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

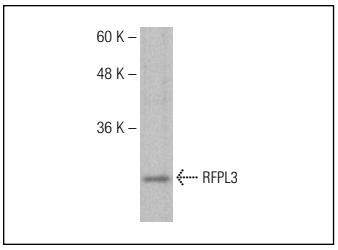
Suitable for use as control antibody for RFPL3 siRNA (h): sc-76396, RFPL3 shRNA Plasmid (h): sc-76396-SH and RFPL3 shRNA (h) Lentiviral Particles: sc-76396-V.

Molecular Weight of RFPL3: 35 kDa.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



RFPL3 (T-25): sc-133955. Western blot analysis of RFPL3 expression in Jurkat 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 or our catalog for detailed protocols and support products.