

RFPL2 (T-24): sc-133954

BACKGROUND

RFPL1, RFPL2 and RFPL3 (ret finger protein-like 1, 2 and 3, respectively), exist as a cluster of genes mapping to human chromosome 22q12.2-q13.3, 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 three RFPL genes encodes two 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: 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: RFPL2 (human) mapping to 22q12.3.

SOURCE

RFPL2 (T-24) is an affinity purified rabbit polyclonal antibody raised against synthetic RFPL2 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

RFPL2 (T-24) is recommended for detection of RFPL2 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).

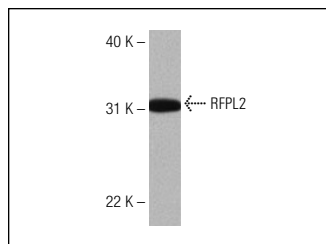
Suitable for use as control antibody for RFPL2 siRNA (h): sc-76395, RFPL2 shRNA Plasmid (h): sc-76395-SH and RFPL2 shRNA (h) Lentiviral Particles: sc-76395-V.

Molecular Weight of RFPL2 isoforms: 42/32/36 kDa.

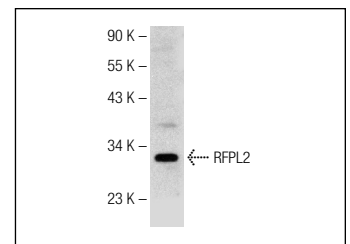
RECOMMENDED SECONDARY REAGENTS

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



RFPL2 (T-24): sc-133954. Western blot analysis of RFPL2 expression in human fetal liver tissue extract.



RFPL2 (T-24): sc-133954. Western blot analysis of RFPL2 expression in K-562 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.