# RPESP (Y-21): sc-133976



The Power to Question

#### **BACKGROUND**

RPE-spondin (RPESP) is a 264 amino acid protein encoded by a gene mapping to human chromosome 8. Made up of nearly 146 million bases, chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Trisomy 8, also known as Warkany syndrome 2, most often results in early miscarriage but is occasionally seen in a mosaic form in surviving patients who suffer to a varying degree from a number of symptoms including retarded mental and motor development, and certain facial and developmental defects. WRN is a DNA helicase encoded by chromosome 8 and shown defective in those with the early aging disorder Werner syndrome. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

## REFERENCES

- Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. Am. J. Med. Genet. 88: 239-243.
- 2. Kashino, G., Kodama, S., Suzuki, K., Oshimura, M. and Watanabe, M. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
- Selicorni, A., Guerneri, S., Ratti, A. and Pizzuti, A. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. Hum. Genet. 110: 64-67.
- McQueen, M.B., Devlin, B., Faraone, S.V., Nimgaonkar, V.L., Sklar, P., Smoller, J.W., Abou Jamra, R., Albus. M., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
- Agrelo, R., Cheng, W.H., Setien, F., Ropero, S., Espada, J., Fraga, M.F., Herranz, M., Paz, M.F., Sanchez-Cespedes, M., Artiga, M.J., Guerrero, D., Castells, A., von Kobbe, C., Bohr, V.A. and Esteller, M. 2006. Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. Proc. Natl. Acad. Sci USA 103: 8822-8827.
- Mossafa, H., Damotte, D., Jenabian, A., Delarue, R., Vincenneau, A., Amouroux, I., Jeandel, R., Khoury, E., Martelli, J.M., Samson, T., Tapia, S., Flandrin, G. and Troussard, X. 2006. Non-Hodgkin's lymphomas with Burkitt-like cells are associated with c-Myc amplification and poor prognosis. Leuk. Lymphoma 47: 1885-1893.
- 7. Nusbaum, C., Mikkelsen, T.S., Zody, M.C., Asakawa, S., Taudien, S., Garber, M., Kodira, C.D., Schueler, M.G., Shimizu, A., Whittaker, C.A., Chang, J.L, et al. 2006. DNA sequence and analysis of human chromosome 8. Nature 439: 331-335.

## CHROMOSOMAL LOCATION

Genetic locus: C8orf84 (human) mapping to 8q21.11; Gm106 (mouse) mapping to 1 A3.

#### **SOURCE**

RPESP (Y-21) is an affinity purified rabbit polyclonal antibody raised against synthetic RPESP peptide of human origin.

#### **PRODUCT**

Each vial contains 50  $\mu g$  lgG in 500  $\mu l$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## **APPLICATIONS**

RPESP (Y-21) is recommended for detection of RPESP of mouse, rat and 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 RPESP siRNA (h): sc-77491, RPESP shRNA Plasmid (h): sc-77491-SH and RPESP shRNA (h) Lentiviral Particles: sc-77491-V.

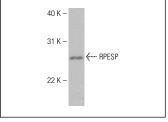
Molecular Weight of ARPE-19: 30 kDa.

Positive Controls: RPE-J cell lysate: sc-24771, Jurkat whole cell lysate: sc-2204 or Y79 cell lysate: sc-2240.

#### **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**



RPESP (Y-21): sc-133976. Western blot analysis of RPESP 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.