PRTFDC1 (h): 293 Lysate: sc-110979



The Power to Question

BACKGROUND

PRTFDC1 (phosphoribosyltransferase domain-containing protein 1), also known as HHGP, is a 225 amino acid protein that belongs to the purine/pyrimidine phosphoribosyltransferase family. The functions of PRTFCD1 are not well understood; however it has been suggested that it is frequently silenced in oral squamous-cell carcinomas by aberrant promoter hypermethylation. Conserved in vertebrates, PRTFDC1 is suggested to be a possible tumor-suppressor. PRTFDC1 is encoded by a gene which maps to chromosome 10. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of the total DNA in cells and encodes nearly 1,200 genes. Three isoforms of PRTFDC1 exist due to alternative splicing events.

REFERENCES

- Jabs, E.W., Li, X., Scott, A.F., Meyers, G., Chen, W., Eccles, M., Mao, J.I., Charnas, L.R., Jackson, C.E. and Jaye, M. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. Nat. Genet. 8: 275-279.
- Deloukas, P., French, L., Meitinger, T. and Moschonas, N.K. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. Cytogenet. Cell Genet. 90: 1-12.
- 3. Gilbert, F. 2001. Chromosome 10. Genet. Test. 5: 69-82.
- 4. Nonneman, D. and Rohrer, G.A. 2004. Comparative mapping of human chromosome 10 to pig chromosomes 10 and 14. Anim. Genet. 35: 338-343.
- Deloukas, P., Earthrowl, M.E., Grafham, D.V., Rubenfield, M., French, L., Steward, C.A., Sims, S.K., Jones, M.C., Searle, S., Scott, C., Howe, K., Hunt, S.E., Andrews, T.D., Gilbert, J.G., Swarbreck, D., Ashurst, J.L., Taylor, A., Battles, J., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. Nature 429: 375-381.
- Nicklas, J.A. 2006. Pseudogenes of the human HPRT1 gene. Environ. Mol. Mutagen. 47: 212-218.
- 7. Keebaugh, A.C., Sullivan, R.T. and Thomas, J.W. 2007. Gene duplication and inactivation in the HPRT gene family. Genomics 89: 134-142.
- 8. Cai, L.Y., Abe, M., Izumi, S., Imura, M., Yasugi, T. and Ushijima, T. 2007. Identification of PRTFDC1 silencing and aberrant promoter methylation of GPR150, ITGA8 and HOXD11 in ovarian cancers. Life Sci. 80: 1458-1465.
- Suzuki, E., Imoto, I., Pimkhaokham, A., Nakagawa, T., Kamata, N., Kozaki, K.I., Amagasa, T. and Inazawa, J. 2007. PRTFDC1, a possible tumor-suppressor gene, is frequently silenced in oral squamous-cell carcinomas by aberrant promoter hypermethylation. Oncogene 26: 7921-7932.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: PRTFDC1 (human) mapping to 10p12.1.

PRODUCT

PRTFDC1 (h): 293 Lysate represents a lysate of human PRTFDC1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PRTFDC1 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive PRTFDC1 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RESEARCH USE

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com