RNF10 (h2): 293 Lysate: sc-114496



The Power to Question

BACKGROUND

The RING-type zinc-finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RNF10 (RING finger protein 10), also known as RIE2, is an 811 amino acid protein that localizes to the cytoplasm and contains one RING-type zinc-finger. Existing as multiple alternatively spliced isoforms, RNF10 interacts with MOX-2 and is thought to regulate its transcription in Schwann cells, possibly playing a role in myelin formation. The gene encoding RNF10 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

- 1. Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. Curr. Opin. Struct. Biol. 6: 395-401.
- Nagase, T., Seki, N., Ishikawa, K., Ohira, M., Kawarabayasi, Y., Ohara, O., Tanaka, A., Kotani, H., Miyajima, N. and Nomura, N. 1996. Prediction of the coding sequences of unidentified human genes. VI. The coding sequences of 80 new genes (KIAA0201-KIAA0280) deduced by analysis of cDNA clones from cell line KG-1 and brain. DNA Res. 3: 321-329, 341-354.
- Lorick, K.L., Jensen, J.P., Fang, S., Ong, A.M., Hatakeyama, S. and Weissman, A.M. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. Proc. Natl. Acad. Sci. USA 96: 11364-11369.
- Seki, N., Hattori, A., Sugano, S., Muramatsu, M. and Saito, T. 2000. cDNA cloning, expression profile, and genomic structure of human and mouse RNF10/Rnf10 genes, encoding a novel RING finger protein. J. Hum. Genet. 45: 38-42.
- Lin, J., Friesen, M.T., Bocangel, P., Cheung, D., Rawszer, K. and Wigle, J.T. 2005. Characterization of mesenchyme homeobox 2 (MEOX2) transcription factor binding to RING finger protein 10. Mol. Cell. Biochem. 275: 75-84.
- 6. Hoshikawa, S., Ogata, T., Fujiwara, S., Nakamura, K. and Tanaka, S. 2008. A novel function of RING finger protein 10 in transcriptional regulation of the myelin-associated glycoprotein gene and myelin formation in Schwann cells. PLoS ONE 3: E3464.

CHROMOSOMAL LOCATION

Genetic locus: RNF10 (human) mapping to 12q24.31.

PRODUCT

RNF10 (h2): 293 Lysate represents a lysate of human RNF10 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

RNF10 (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive RNF10 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.

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.

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