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SANTA CRUZ BIOTECHNOLOGY, INC.

TMEM178 siRNA (m): sc-154415

BACKGROUND

Transmembrane protein 178 (TMEM 178) is a 297 amino acid protein that is localized to the membrane. TMEM178 is a multi-pass membrane protein with identified homologs in mouse, rat and *Xenopus*. Human TMEM178 contains a 25 amino acid signal peptide and a mature chain that spans amino acids 26 to 297. Two isoforms of TMEM178 exist as a result of alternative splicing events. TMEM178 is encoded by a gene that maps to chromosome 2. The second largest human chromosome, 2 consists of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

REFERENCES

1. Yamakawa, K., Mitchell, S., Hubert, R., Chen, X.N., Colbern, S., Huo, Y.K., Gadomski, C., Kim, U.J. and Korenberg, J.R. 1995. Isolation and characterization of a candidate gene for progressive myoclonus epilepsy on 21q22.3. Hum. Mol. Genet. 4: 709-716.
2. Lalioti, M.D., Chen, H., Rossier, C., Shafaatian, R., Reid, J.D. and Antonarakis, S.E. 1996. Cloning the cDNA of human PWP.which encodes a protein with WD repeats and maps to 21q22.3. Genomics 35: 321-327.
3. Nagamine, K., Kudoh, J., Minoshima, S., Kawasaki, K., Asakawa, S., Ito, F. and Shimizu, N. 1997. Genomic organization and complete nucleotide sequence of the human PWP2 gene on chromosome 21. Genomics 42: 528-531.
4. Kudoh, J., Nagamine, K., Asakawa, S., Abe, I., Kawasaki, K., Maeda, H., Tsujimoto, S., Minoshima, S., Ito, F. and Shimizu, N. 1997. Localization of 16 exons to a 450-kb region involved in the autoimmune polyglandular disease type I (APECED) on human chromosome 21q22.3. DNA Res. 4: 45-52.
5. Nagamine, K., Kudoh, J., Kawasaki, K., Minoshima, S., Asakawa, S., Ito, F. and Shimizu, N. 1997. Genomic organization and complete nucleotide sequence of the TMEM1 gene on human chromosome 21q22.3. Biochem. Biophys. Res. Commun. 235: 185-190.
6. Lafrenière, R.G., Kibar, Z., Rochefort, D.L., Han, F.Y., Fon, E.A., Dube, M.P., Kang, X., Baird, S., Korneluk, R.G., Rommens, J.M. and Rouleau, G.A. 1997. Genomic structure of the human GT334 (EHOC-1) gene mapping to 21q22.3. Gene 198: 313-321.
7. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602103. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
8. Deutsch, S., Lyle, R., Dermitzakis, E.T., Attar, H., Subrahmanyan, L., Gehrig, C., Parand, L., Gagnebin, M., Rougemont, J., Jongeneel, C.V. and Antonarakis, S.E. 2005. Gene expression variation and expression quantitative trait mapping of human chromosome .genes. Hum. Mol. Genet. 14: 3741-3749.
9. Cox, R., Chen, S.H., Yoo, E. and Segev, N. 2007. Conservation of the TRAPPII-specific subunits of a Ypt/Rab exchanger complex. BMC Evol. Biol. 7: 12.

CHROMOSOMAL LOCATION

Genetic locus: Tmem178 (mouse) mapping to 17 E3.

PRODUCT

TMEM178 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TMEM178 shRNA Plasmid (m): sc-154415-SH and TMEM178 shRNA (m) Lentiviral Particles: sc-154415-V as alternate gene silencing products.

For independent verification of TMEM178 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154415A, sc-154415B and sc-154415C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

TMEM178 siRNA (m) is recommended for the inhibition of TMEM178 expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TMEM178 gene expression knockdown using RT-PCR Primer: TMEM178 (m)-PR: sc-154415-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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