TARSL2 (m): 293T Lysate: sc-127631



The Power to Question

BACKGROUND

TARSL2 (threonyl-tRNA synthetase-like protein 2) is an 802 amino acid cytoplasmic protein that belongs to the class-II aminoacyl-tRNA synthetase family and exists in 2 alternatively spliced isoforms. The gene that encodes TARSL2 contains 71,007 bases and maps to human chromosome 15q26.3. Housing approximately 106 million base pairs and encoding more than 700 genes, chromosome 15 makes up about 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11-q13 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11-q13 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. In cases of Prader-Willi syndrome, there is a partial or complete deletion of this region from the paternal copy of chromosome 15. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

REFERENCES

- Hurowitz, G.I., Silver, J.M., Brin, M.F., Williams, D.T. and Johnson, W.G. 1993. Neuropsychiatric aspects of adult-onset Tay-Sachs disease: two case reports with several new findings. J. Neuropsychiatry Clin. Neurosci. 5: 30-36.
- 2. Midla, G.S. 2008. Diagnosis and management of patients with Marfan syndrome. JAAPA 21: 21-25.
- Rao, N., Jhamb, D., Milner, D.J., Li, B., Song, F., Wang, M., Voss, S.R., Palakal, M., King, M.W., Saranjami, B., Nye, H.L., Cameron, J.A. and Stocum, D.L. 2009. Proteomic analysis of blastema formation in regenerating axolotl limbs. BMC Biol. 7: 83.
- 4. Dan, B. 2009. Angelman syndrome: current understanding and research prospects. Epilepsia 50: 2331-2339.
- Ferrer-Bolufer, I., Dalmau, J., Quiroga, R., Oltra, S., Orellana, C., Monfort, S., Roselló, M., De La Osa, A. and Martinez, F. 2009. Tyrosinemia type 1 and Angelman syndrome due to paternal uniparental isodisomy 15. J. Inherit. Metab. Dis. 32: S349-S353.
- Wawrzik, M., Unmehopa, U.A., Swaab, D.F., van de Nes, J., Buiting, K. and Horsthemke, B. 2010. The C15orf2 gene in the Prader-Willi syndrome region is subject to genomic imprinting and positive selection. Neurogenetics 11: 153-161.
- 7. Emes, R.D. and Grant, S.G. 2011. The human postsynaptic density shares conserved elements with proteomes of unicellular eukaryotes and prokaryotes. Front. Neurosci. 5: 44.

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: Tarsl2 (mouse) mapping to 7 C.

PRODUCT

TARSL2 (m): 293T Lysate represents a lysate of mouse TARSL2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TARSL2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TARSL2 antibodies. Recommended use: $10-20~\mu l$ per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

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