TTC4 (m): 293T Lysate: sc-126162



The Power to Question

BACKGROUND

The tetratricopeptide repeat (TPR) motif is a degenerate, 34 amino acid sequence found in many proteins and acts to mediate protein-protein interactions in various pathways. At the sequence level, there can be up to 16 tandem TPR repeats, each of which has a helix-turn-helix shape that stacks on other TPR repeats to achieve ligand binding specificity. TTC4 (tetratricopeptide repeat domain 4) is a 387 amino acid ubiquitously expressed nucleoplasmic protein containing three TPR repeats. TTC4 localizes to the cytoplasm, however, when paired with MSL-1, TTC4 translocates to the nucleus during the $\rm G_1$ and S phases of the cell cycle. TTC4 interacts with HSP 90, HSP 70 and with the replication protein Cdc6 and may be associated with the progression of malignant melanoma. The gene encoding TTC4 is located on human chromosome 1, which spans about 260 million base pairs and comprises nearly 8% of the human genome.

REFERENCES

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- 2. Hey, Y., Brintnell, B., James, L.A. and Varley, J.M. 2000. Assignment of TTC4 to human chromosome band 1p31.3 and a pseudogene TTC4P to 7p14→p13 by *in situ* hybridization. Cytogenet. Cell Genet. 88: 272-274.
- Su, G., Casey, G. and Cowell, J.K. 2000. Genomic structure of the human tetratricopeptide repeat-containing gene, TTC4, from chromosome region 1p31 and mutation analysis in breast cancers. Int. J. Mol. Med. 5: 197-200.
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- Irwin, N., Walker, G. and Hayward, N. 2002. Lack of TTC4 mutations in melanoma. J. Invest. Dermatol. 119: 186-187.

CHROMOSOMAL LOCATION

Genetic locus: Ttc4 (mouse) mapping to 4 C7.

PRODUCT

TTC4 (m): 293T Lysate represents a lysate of mouse TTC4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TTC4 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TTC4 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.

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.

RESEARCH USE

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

PROTOCOLS

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

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