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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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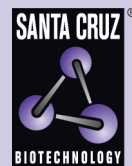
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Asparagine synthetase (m): 293T Lysate: sc-118591

BACKGROUND

Glutamine-hydrolyzing Asparagine synthetase is also commonly designated cell cycle control protein TS11. Asparagine synthetase plays an important role in the amino-acid biosynthesis pathway and is also important for L-asparagine biosynthesis. Via the L-glutamine route, it is involved in the synthesis of L-asparagine from L-aspartate. The protein contains one Asparagine synthetase domain and one type-2 glutamine amidotransferase domain. The cell-cycle regulated gene encoding for Asparagine synthetase, TS11, is necessary for G₁ progression.

REFERENCES

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2. Van Heeke, G. and Schuster, S.M. 1989. The N-terminal cysteine of human Asparagine synthetase is essential for glutamine-dependent activity. *J. Biol. Chem.* 264: 19475-19477.
3. Greco, A., Gong, S.S., Ittmann, M. and Basilico, C. 1989. Organization and expression of the cell cycle gene, TS11, that encodes Asparagine synthetase. *Mol. Cell. Biol.* 9: 2350-2359.
4. Chen, H., Pan, Y.X., Dudenhausen, E.E. and Kilberg, M.S. 2004. Amino acid deprivation induces the transcription rate of the human Asparagine synthetase gene through a timed program of expression and promoter binding of nutrient-responsive basic region/leucine zipper transcription factors as well as localized histone acetylation. *J. Biol. Chem.* 279: 50829-50839.
5. Krejci, O., Starkova, J., Otova, B., Madzo, J., Kalinova, M., Hrusak, O. and Trka, J. 2004. Upregulation of Asparagine synthetase fails to avert cell cycle arrest induced by L-asparaginase in TEL/AML1-positive leukaemic cells. *Leukemia* 18: 434-441.
6. Fine, B.M., Kaspers, G.J., Ho, M., Loonen, A.H. and Boxer, L.M. 2005. A genome-wide view of the *in vitro* response to L-asparaginase in acute lymphoblastic leukemia. *Cancer Res.* 65: 291-299.

CHROMOSOMAL LOCATION

Genetic locus: Asns (mouse) mapping to 6 A1.

PRODUCT

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

APPLICATIONS

Asparagine synthetase (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Asparagine synthetase antibodies. Recommended use: 10-20 µl 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.