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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

DaRS (h): 293T Lysate: sc-159660

BACKGROUND

Aminoacyl-tRNA synthetases consist of a family of enzymes that catalyze the specific aminoacylation of cognate tRNA in the initial step of ribosome-dependent protein biosynthesis. DaRS is part of a multisubunit complex of aminoacyl-tRNA synthetases and is involved in the transfer of Asp-tRNA to EF-1 α1 (elongation factor α 1). The N-terminus of DaRS in vertebrates is a newly evolved structure that contains a putative amphiphilic helix and is dissimilar between different species. The N-terminal extension acts as a switch that, when in its stretched form, reduces the rate of dissociation of Asp-tRNA from DaRS, thereby providing enough time for EF-1 α1 to interact with Asp-tRNA. This suggests that the N-terminus of DaRS plays a critical role in its catalytic function. DaRS contains two phosphorylations sites, forms homodimers and localizes to the cytoplasm.

REFERENCES

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2. Jacobo-Molina, A., Peterson, R. and Yang, D.C. 1989. cDNA sequence, predicted primary structure, and evolving amphiphilic helix of human aspartyl-tRNA synthetase. J. Biol. Chem. 264: 16608-16612.
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6. Sang Lee, J., Gyu Park, S., Park, H., Seol, W., Lee, S. and Kim, S. 2002. Interaction network of human aminoacyl-tRNA synthetases and subunits of elongation factor 1 complex. Biochem. Biophys. Res. Commun. 291: 158-164.
7. Cheong, H.K., Park, J.Y., Kim, E.H., Lee, C., Kim, S., Kim, Y., Choi, B.S. and Cheong, C. 2003. Structure of the N-terminal extension of human aspartyl-tRNA synthetase: implications for its biological function. Int. J. Biochem. Cell Biol. 35: 1548-1557.

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: DARS (human) mapping to 2q21.3.

PRODUCT

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

APPLICATIONS

DaRS (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive DaRS 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.

RESEARCH USE

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