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Diagnostik & molekulare Diagnostik



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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Gl Syn (h): 293T Lysate: sc-159959

BACKGROUND

Glutamine synthetase (Gl Syn) forms a homo-octamer that serves as a catalyst for the amination of glutamic acid to form glutamine. This enzyme is a marker for astrocytes, which serve as the primary site of conversion of glutamic acid to glutamine in the brain. Induction of glutamine synthetase is seen upon astrocyte cell contact with neurons. Elevated expression of glutamine synthetase in glial cells has been shown to protect neurons from degeneration due to excess glutamate. Glutamine synthetase is also present in the liver and is involved in nitrogen homeostasis. Overexpression of glutamine synthetase has been shown in primary liver cancers, indicating a potential role for glutamine synthetase in hepatocyte transformation.

REFERENCES

1. Gibbs, C.S., Campbell, K.E. and Wilson, R.H. 1987. Sequence of a human glutamine synthetase cDNA. *Nucleic Acids Res.* 15: 6293.
2. Linser, P.J. and Perkins, M. 1987. Gliogenesis in the embryonic avian optic tectum: neuronal-glial interactions influence astroglial phenotype maturation. *Brain Res.* 428: 277-290.
3. Vardimon, L., Fox, L.L., Degenstein, L. and Moscona, A.A. 1988. Cell contacts are required for induction by cortisol of glutamine synthetase gene transcription in the retina. *Proc. Natl. Acad. Sci. USA* 85: 5981-5985.
4. Mill, J.F., Mearow, K.M., Purohit, H.J., Haleem-Smith, H., King, R. and Freese, E. 1991. Cloning and functional characterization of the rat glutamine synthetase gene. *Brain Res. Mol. Brain Res.* 9: 197-207.
5. Van den Hoff, M.J., Geerts, W.J., Das, A.T., Moorman, A.F. and Lamers, W.H. 1991. cDNA sequence of the long mRNA for human glutamine synthetase. *Biochim. Biophys. Acta* 1090: 249-251.
6. Christa, L., Simon, M.T., Flinois, J.P., Gebhardt, R., Brechot, C. and Lasserre, C. 1994. Overexpression of glutamine synthetase in human primary liver cancer. *Gastroenterology* 106: 1312-1320.
7. Gorovits, R., Avidan, N., Avisar, N., Shaked, I. and Vardimon, L. 1997. Glutamine synthetase protects against neuronal degeneration in injured retinal tissue. *Proc. Natl. Acad. Sci. USA* 94: 7024-7029.

CHROMOSOMAL LOCATION

Genetic locus: GLUL (human) mapping to 1q25.3.

PRODUCT

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

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.

APPLICATIONS

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