

GGT1 (m): 293T Lysate: sc-120476

BACKGROUND

GGT (γ -glutamyltranspeptidase) acts as a glutathionase and catalyzes the transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors. This enzyme is located on the outer surface of the cell membrane and is widely distributed in mammalian tissues involved in absorption and secretion. In humans, hepatic GGT activity is elevated in some liver diseases. GGT1 is released into the bloodstream after liver damage, and an elevated level of the enzyme may be a useful early sign of hepatocellular carcinoma. GGT5 converts leukotriene C4 to leukotriene D4; it does not, however, convert synthetic substrates that are commonly used to assay GGT. In human serum and in human tissues, there is a marked heterogeneity in GGT, but this heterogeneity can be attributed to different glycosylation of the same peptide rather than to the products of different genes.

REFERENCES

1. Bulle, F., Mattei, M.G., Siegrist, S., Pawlak, A., Passage, E., Chobert, M.N., Laperche, Y. and Guellaen, G. 1987. Assignment of the human γ -glutamyltransferase gene to the long arm of chromosome 22. *Hum. Genet.* 76: 283-286.
2. Heisterkamp, N., Rajpert-De Meyts, E., Uribe, L., Forman, H.J. and Groffen, J. 1991. Identification of a human γ -glutamyl cleaving enzyme related to, but distinct from, γ -glutamyltranspeptidase. *Proc. Natl. Acad. Sci. USA* 88: 6303-6307.
3. Visvikis, A., Thioudellet, C., Oster, T., Fournel-Gigleux, S., Wellman, M. and Siest, G. 1991. High-level expression of enzymatically active mature human γ -glutamyltransferase in transgenic V79 Chinese hamster cells. *Proc. Natl. Acad. Sci. USA* 88: 7361-7365.
4. LocusLink Report (LocusID: 231950). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: Ggt1 (mouse) mapping to 10 C1.

PRODUCT

GGT1 (m): 293T Lysate represents a lysate of mouse GGT1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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.

APPLICATIONS

GGT1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GGT1 antibodies. Recommended use: 10-20 μ l per lane.

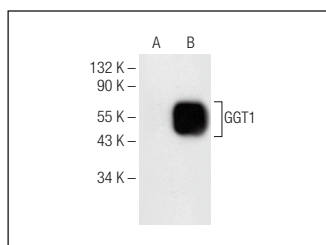
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GGT1 (F-7): sc-374495 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GGT1 expression in GGT1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GGT1 (F-7): sc-374495. Western blot analysis of GGT1 expression in non-transfected: sc-117752 (**A**) and mouse GGT1 transfected: sc-120476 (**B**) 293T whole cell lysates.

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.