SANTA CRUZ BIOTECHNOLOGY, INC.

GGT6 (m): 293T Lysate: sc-125382

BACKGROUND

γ-glutamyltranspeptidase (GGT) 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. Belonging to the γ-glutamyltranspeptidase family, GGT6 (γ-glutamyltransferase 6), is a 493 amino acid single-pass type II membrane protein that cleaves glutathione conjugates. GGT6 exists as two alternatively spliced isoforms.

REFERENCES

1. Tate, S.S. and Meister, A. 1981. γ-Glutamyl transpeptidase: catalytic, structural and functional aspects. Mol. Cell. Biochem. 39: 357-368.
2. Welbourne, T.C. and Dass, P.D. 1982. Function of renal γ-glutamyltransferase: significance of glutathione and glutamine interactions. Life Sci. 30: 793-801.
3. Wetmore, L.A., et al. 1993. Human lung expresses unique γ-glutamyl transpeptidase transcripts. Proc. Natl. Acad. Sci. USA 90: 7461-7465.
4. Taniguchi, N. and Ikeda, Y. 1998. γ-Glutamyl transpeptidase: catalytic mechanism and gene expression. Adv. Enzymol. Relat. Areas Mol. Biol. 72: 239-278.
5. Ohkama-Ohtsu, N., et al. 2007. Characterization of the extracellular γ-glutamyl transpeptidases, GGT1 and GGT2, in Arabidopsis. Plant J. 49: 865-877.

CHROMOSOMAL LOCATION

Genetic locus: Ggt6 (mouse) mapping to 11 B4.

PRODUCT

GGT6 (m): 293T Lysate represents a lysate of mouse GGT6 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

GGT6 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GGT6 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.