

GGT5 (H-235): sc-20640

BACKGROUND

γ -glutamyltranspeptidase (GGT) acts as a glutathionease 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 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., et al. 1987. Assignment of the human γ -glutamyl transferase gene to the long arm of chromosome 22. *Hum. Genet.* 76: 283-286.
2. Heisterkamp, N., et al. 1991. Identification of a human γ -glutamyl cleaving enzyme related to, but distinct from, γ -glutamyl transpeptidase. *Proc. Natl. Acad. Sci. USA* 88: 6303-6307.
3. Visvikis, A., et al. 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: GGT5 (human) mapping to 22q11.23; Ggt5 (mouse) mapping to 10 C1.

SOURCE

GGT5 (H-235) is a rabbit polyclonal antibody raised against amino acids 161-395 of GGT5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GGT5 (H-235) is recommended for detection of GGT5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

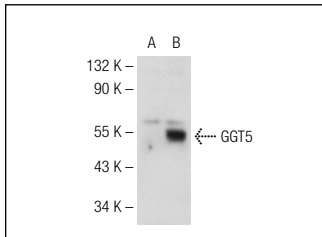
Suitable for use as control antibody for GGT5 siRNA (h): sc-40634, GGT5 siRNA (m): sc-40635, GGT5 shRNA Plasmid (h): sc-40634-SH, GGT5 shRNA Plasmid (m): sc-40635-SH, GGT5 shRNA (h) Lentiviral Particles: sc-40634-V and GGT5 shRNA (m) Lentiviral Particles: sc-40635-V.

Positive Controls: GGT5 (h2): 293T Lysate: sc-111560.

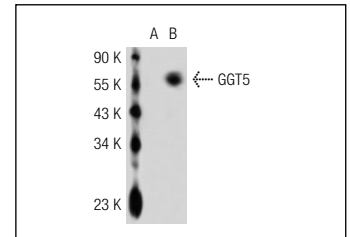
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GGT5 (H-235): sc-20640. Western blot analysis of GGT5 expression in non-transfected: sc-110760 (A) and human GGT5 transfected: sc-111022 (B) 293 whole cell lysates.



GGT5 (H-235): sc-20640. Western blot analysis of GGT5 expression in non-transfected: sc-117752 (A) and human GGT5 transfected: sc-111560 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **GGT5 (F-8): sc-373693**, our highly recommended monoclonal alternative to GGT5 (H-235).