SANTA CRUZ BIOTECHNOLOGY, INC.

GSTT (FL-240): sc-32938

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The GST superfamily is made up of several subfamilies. Glutathione S-transferase P (GSTP1) belongs to the π subfamily and is involved in the conjugation of reduced glutathione to a variety of endogenous and exogenous hydrophobic electrophiles. Glutathione S-transferase μ 1 (GSTM1) is a cytoplasmic liver protein belonging to the μ family and has the same basic functions as GSTP1-1. Glutathione S-transferase θ 1 (GSTT1), a cytoplasmic homodimer belonging to the θ family, is expressed in erythrocytes. It is active in the reduced glutathione conjugation and also displays glutathione peroxidase activity with cumene hydroperoxide.

REFERENCES

1. Meyer, D.J., Coles, B., Pemble, S.E., Gilmore, K.S., Fraser, G.M. and Ketterer, B. 1991. θ, a new class of glutathione transferases purified from rat and man. Biochem. J. 274: 409-414.
2. Mainwaring, G.W., Williams, S.M., Foster, J.R., Tugwood, J. and Green, T. 1996. The distribution of θ-class glutathione S-transferases in the liver and lung of mouse, rat and human. Biochem. J. 318: 297-303.
3. Pemble, S., Schroeder, K.R., Spencer, S.R., Meyer, D.J., Hallier, E., Bolt, H.M., Ketterer, B. and Taylor, J.B. 1994. Human glutathione S-transferase θ (GSTT1): cDNA cloning and the characterization of a genetic polymorphism. Biochem. J. 300: 271-276.
4. Jemth, P. and Mannervik, B. 1997. Kinetic characterization of recombinant human glutathione transferase T1-1, a polymorphic detoxication enzyme. Arch. Biochem. Biophys. 348: 247-254.

SOURCE

GSTT (FL-240) is a rabbit polyclonal antibody raised against amino acids 1-240 representing full length GSTT1 of human origin.

PRODUCT

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

APPLICATIONS

GSTT (FL-240) is recommended for detection of Glutathione S-transferase θ 1 and 3 and, to a lesser extent, GSTT2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

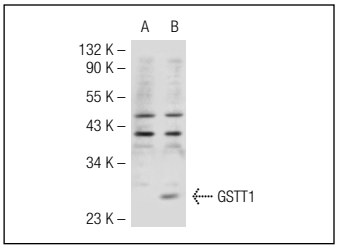
GSTT (FL-240) is also recommended for detection of Glutathione S-transferase θ 1 and 3 and, to a lesser extent, GSTT2 in additional species, including equine, canine, bovine and porcine.

Positive Controls: GSTT1 (m): 293T Lysate: sc-120670 or mouse liver extract: sc-2256.

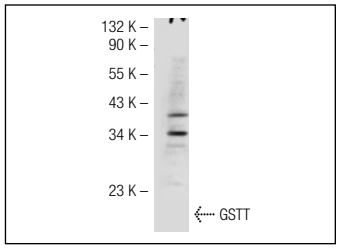
RECOMMENDED SECONDARY REAGENTS

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



GSTT (FL-240): sc-32938. Western blot analysis of GSTT1 expression in non-transfected: sc-117752 (**A**) and mouse GSTT1 transfected: sc-120670 (**B**) 293T whole cell lysates.



GSTT (FL-240): sc-32938. Western blot analysis of mouse liver tissue extract.

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.