

GSTT1 (E-17): sc-28498

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., et al. 1991. θ , a new class of glutathione transferases purified from rat and man. *Biochem. J.* 274: 409-414.
2. Pemble, S., et al. 1994. Human glutathione S-transferase θ (GSTT1): cDNA cloning and the characterization of a genetic polymorphism. *Biochem. J.* 300: 271-276.
3. Mainwaring, G.W., et al. 1996. The distribution of θ -class glutathione S-transferases in the liver and lung of mouse, rat and human. *Biochem. J.* 318: 297-303.
4. Jemth, P., et al. 1997. Kinetic characterization of recombinant human glutathione transferase T1-1, a polymorphic detoxication enzyme. *Arch. Biochem. Biophys.* 348: 247-254.
5. Sprenger, R., et al. 2000. Characterization of the glutathione S-transferase GSTT1 deletion: discrimination of all genotypes by polymerase chain reaction indicates a trimodular genotype-phenotype correlation. *Pharmacogenetics* 10: 557-565.

CHROMOSOMAL LOCATION

Genetic locus: GSTT1 (human) mapping to 22q11.23; Gstt1/Gstt3 (mouse) mapping to 10 C1.

SOURCE

GSTT1 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Glutathione S-transferase τ 1 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.

Blocking peptide available for competition studies, sc-28498 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

GSTT1 (E-17) is recommended for detection of GSTT1 of mouse, rat and human origin and, to a lesser extent, GSTT3 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).

GSTT1 (E-17) is also recommended for detection of GSTT1 and GSTT3 in additional species, including equine, canine and bovine.

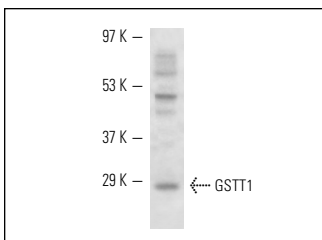
Molecular Weight of GSTT1: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GSTT1 (E-17): sc-28498. Western blot analysis of GSTT1 expression in Hep G2 whole cell lysate.

PROTOCOLS

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Try **GSTT (D-1): sc-393035**, our highly recommended monoclonal alternative to GSTT1 (E-17).