GSTT (D-1): sc-393035

BACKGROUND

The GST superfamily is made up of several subfamilies. Glutathione S-transferase-105429se P (GSTP1) belongs to the α subfamily and is involved in the conjugation of reduced glutathione to a variety of endogenous and exogenous hydrophobic electrophiles. Glutathione S-transferase μ1 (GSTM1) is a cytoplasmic liver protein belonging to the μ family and has the same basic functions as GSTP1-1. Glutathione S-transferase θ1 (GSTT1) is a cytoplasmic homodimer expressed in erythrocytes. It belongs to the θ family. Aside from being active in the reduced glutathione conjugation, this protein displays glutathione peroxidase activity with cumene hydroperoxide.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: GSTT1/GSTT3 (human) mapping to 22q11.23; Gstt1/Gstt3 (mouse) mapping to 10 C1.

SOURCE

GSTT (D-1) is a mouse monoclonal antibody raised against amino acids 1-240 representing full length GSTT1 of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GSTT (D-1) is available conjugated to agarose (sc-393035 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393035 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393035 PE), fluorescein (sc-393035 FITC), Alexa Fluor® 488 (sc-393035 AF488), Alexa Fluor® 546 (sc-393035 AF546), Alexa Fluor® 594 (sc-393035 AF594) or Alexa Fluor® 647 (sc-393035 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393035 AF680) or Alexa Fluor® 790 (sc-393035 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

GSTT (D-1) is recommended for detection of GSTT1 and GSTT3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: mouse liver extract: sc-2256, human liver extract: sc-363766 or Hep G2 cell lysate: sc-2277.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG Kate BP-HRP: sc-516102 or m-IgG 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2002 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG Kate BP-FITC: sc-516140 or m-IgG Kate BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG Kate BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistoamount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

GSTT (D-1): sc-393035, Western blot analysis of GSTT expression in mouse liver (A) and human liver (B) tissue extracts and Hep G2 whole cell lysate (C).

GSTT (D-1): sc-393035, Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells.

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 for detailed protocols and support products.