

GSTP1 (N-18): sc-28494

BACKGROUND

Glutathione S-transferases (GSTs) function in the metabolic detoxification of various environmental carcinogens and lipid hydroperoxides. In response to oxidative stress, upregulation of the GST family member GSTP1 occurs, consistent with this function. Furthermore, the GSTP1 gene is subject to CpG island hypermethylation, a state that correlates with human prostatic carcinogenesis. GSTP1 gene hypermethylation can be detected in urine, ejaculate and plasma from men with prostate cancer, potentially making GSTP1 a useful biomarker for prostate cancer screening.

REFERENCES

1. Board, P.G., et al. 1992. The human Pi class glutathione transferase sequence at 12q13-q14 is a reverse-transcribed pseudogene. *Genomics* 14: 470-473.
2. Klinga-Levan, K., et al. 1993. Mapping of glutathione transferase (GST) genes in the rat. *Hereditas* 119: 285-296.

CHROMOSOMAL LOCATION

Genetic locus: GSTP1 (human) mapping to 11q13.2; Gstp1 (mouse) mapping to 19 A.

SOURCE

GSTP1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of GSTP1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28494 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GSTP1 (N-18) is recommended for detection of GSTP1 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), 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).

GSTP1 (N-18) is also recommended for detection of GSTP1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for GSTP1 siRNA (h): sc-72091, GSTP1 siRNA (m): sc-72092, GSTP1 shRNA Plasmid (h): sc-72091-SH, GSTP1 shRNA Plasmid (m): sc-72092-SH, GSTP1 shRNA (h) Lentiviral Particles: sc-72091-V and GSTP1 shRNA (m) Lentiviral Particles: sc-72092-V.

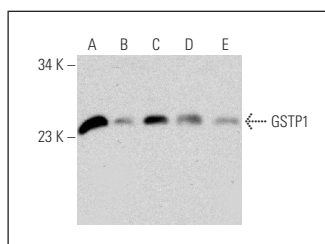
Molecular Weight of GSTP1: 23 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, K-562 whole cell lysate: sc-2203 or JAR cell lysate: sc-2276.

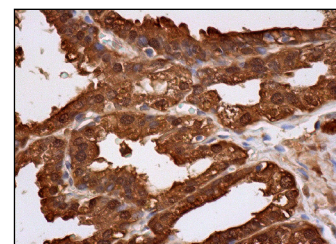
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems

DATA



GSTP1 (N-18): sc-28494. Western blot analysis of GSTP1 expression in K-562 (A), NCI-H1688 (B), PC-3 (C), JAR (D) and JEG-3 (E) whole cell lysates.



GSTP1 (N-18): sc-28494. Immunoperoxidase staining of formalin fixed, paraffin-embedded human seminal vesicle tissue showing cytoplasmic and nuclear 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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **GSTP1 (3F2C2): sc-66000** or **GSTP1 (F-6): sc-376481**, our highly recommended monoclonal alternatives to GSTP1 (N-18).