

GSTP1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1078a

Specification

GSTP1 Antibody - Product Information

Application	WB, IHC, IF, FC
Primary Accession	P09211
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	23kDa KDa

Description

GSTP1 (glutathione-S-transferase, pi 1), also called GST3/DFN7, is a family of enzymes that play an important role in detoxification by catalyzing the conjugation of many hydrophobic and electrophilic compounds with reduced glutathione. GSTP1 act like a tumor suppressor gene, which when inactivated leads to tumor growth, and the -class glutathione S-transferase is commonly inactivated by somatic CpG island hypermethylation in cancers of the prostate, liver, and breast. Methylation of regulatory sequences at the GSTP1 gene locus is found in the vast majority (>90%) of prostate carcinomas and is associated with transcriptional down-regulation.

Immunogen

Purified recombinant fragment of human GSTP1 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

GSTP1 Antibody - Additional Information

Gene ID 2950

Other Names

Glutathione S-transferase P, 2.5.1.18, GST class-pi, GSTP1-1, GSTP1, FAES3, GST3

Dilution

WB~~1/500 - 1/2000

IHC~~1/500 - 1/2000

IF~~1/200 - 1/1000

FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GSTP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GSTP1 Antibody - Protein Information

Name GSTP1 ([HGNC:4638](#))

Synonyms FAES3, GST3

Function

Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2) and prostaglandin J2 (PGJ2) (PubMed:9084911). Participates in the formation of novel hepxilin regioisomers (PubMed:21046276). Negatively regulates CDK5 activity via p25/p35 translocation to prevent neurodegeneration.

Cellular Location

Cytoplasm. Mitochondrion. Nucleus. Note=The 83 N-terminal amino acids function as an uncleaved transit peptide, and arginine residues within it are crucial for mitochondrial localization

GSTP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GSTP1 Antibody - Images

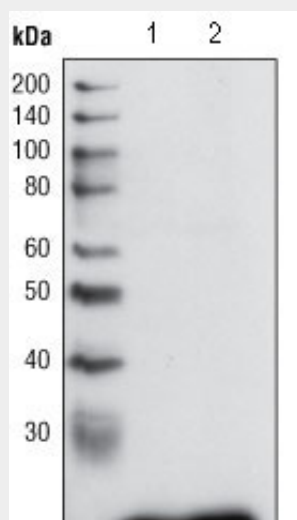


Figure 1: Western blot analysis using GSTP1 mouse mAb against PC3 cell lysate (1) and human cerebellum tissue lysate (2).

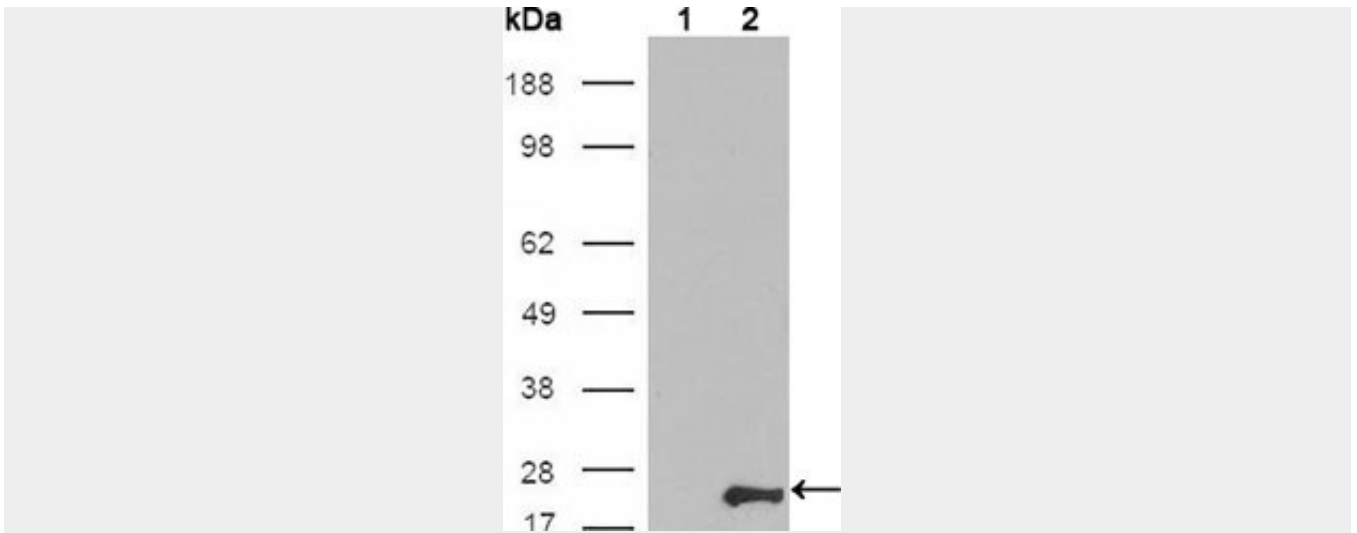


Figure 2: Western blot analysis using GSTP1 mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY GSTP1 cDNA (2).

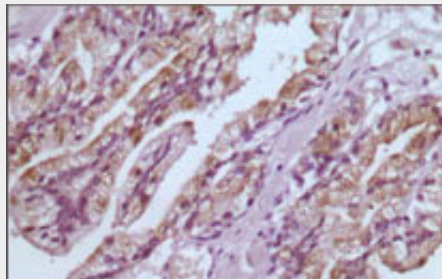


Figure 3: Immunohistochemical analysis of paraffin-embedded human prostate tissues using GSTP1 mouse mAb with DAB staining.

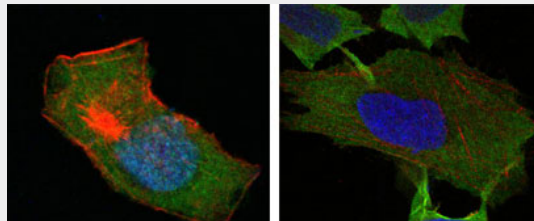


Figure 4: Confocal immunofluorescence analysis of HepG2 (left) and L-02 (right) cells using GSTP1 mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

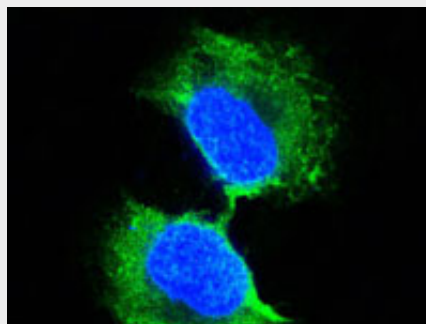


Figure 5: Confocal immunofluorescence analysis of PC-3 cells using GSTP1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

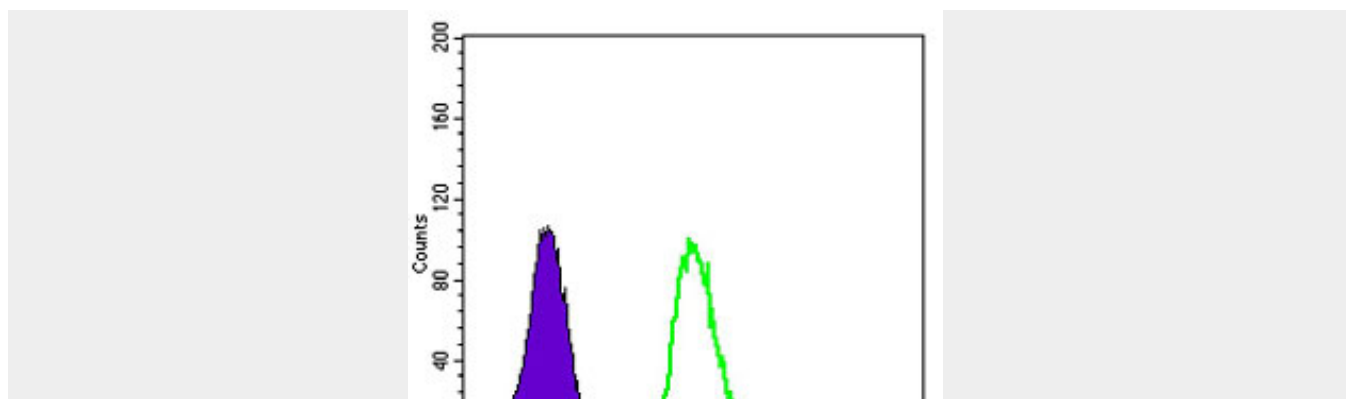


Figure 6: Flow cytometric analysis of K562 cells using GSTP1 mouse mAb (green) and negative control (purple).

GSTP1 Antibody - References

1. Kimihiko Satoh, Ken Itoh, Masayuki Yamamoto. 2002. Carcinogenesis. 23: 457 - 462.2. Xiaohui Lin, William G. Nelson. 2003. Cancer Research. 63: 498-504.