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GSTP1 Rabbit pAb

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Catalog # AP52151

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P09211
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23356
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GstP1
Epitope Specificity	121-210/210
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Glutathione S-transferases (GSTs) are a family of enzymes that play an important role in detoxification by catalyzing the conjugation of many hydrophobic and electrophilic compounds with reduced glutathione. Based on their biochemical, immunologic, and structural properties, the soluble GSTs are categorized into 4 main classes: alpha, mu, pi, and theta. This GST family member is a polymorphic gene encoding active, functionally different GSTP1 variant proteins that are thought to function in xenobiotic metabolism and play a role in susceptibility to cancer, and other diseases. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	2950
Other Names	Glutathione S-transferase P, 2.5.1.18, GST class-pi, GSTP1-1, GSTP1 (HGNC:4638), FAEES3, GST3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1 □g /test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GSTP1 (HGNC:4638)
Synonyms	FAEES3, GST3
Function	Catalyzes conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles (PubMed:1540159, PubMed:1567427, PubMed:8433974). Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2) and prostaglandin J2 (PGJ2) (PubMed:9084911). Participates in the formation of novel hepoxilin regioisomers (PubMed:21046276). Acts as a negative regulator of ferroptosis by mediating glutathione conjugation and detoxification of 4-hydroxynonenal (4-HNE) reactive aldehyde (PubMed:38016474). Negatively regulates CDK5 activity via p25/p35 translocation to prevent neurodegeneration (PubMed:21668448).
Cellular Location	Cytoplasm. Mitochondrion. Nucleus. Note=The 83 N-terminal amino acids function as un uncleaved transit peptide, and arginine residues within it are crucial for mitochondrial localization

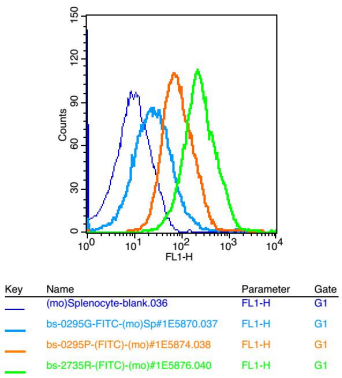
Background

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References

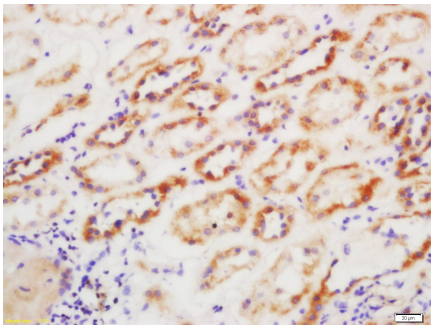
Hatayama I.,et al.Nucleic Acids Res. 18:4606-4606(1990).
Bammler T.K.,et al.Biochem. J. 298:385-390(1994).
Xu X.,et al.J. Biol. Chem. 269:30268-30273(1994).
Kawada T.,et al.Submitted (MAY-1994) to the EMBL/GenBank/DDBJ databases.
Lubec G.,et al.Submitted (APR-2007) to UniProtKB.

Images



Blank control: mouse splenocytes(blue)
Isotype Control Antibody: Rabbit IgG(orange) ;
Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue),
Dilution: 1:100 in 1 X PBS containing 0.5% BSA ;
Primary Antibody Dilution: 1 µl in 100 µL1X PBS containing 0.5% BSA(green).

Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-GSTP1 Polyclonal Antibody, Unconjugated(AP52151) 1:200, overnight at 4°C, followed



by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.