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Glutathione Transferase zeta 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55159

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	O43708
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24212
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Glutathione Transferase zeta 1/MAAI
Epitope Specificity	11-110/216
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasmic
SIMILARITY	Belongs to the GST superfamily. Zeta family. Contains 1 GST C-terminal domain.Contains 1 GST N-terminal domain.
SUBUNIT	Homodimer.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GSTZ1 is a member of the glutathione S transferase (GSTs) super family, encoding multifunctional enzymes important in the detoxification of electrophilic molecules, including carcinogens, mutagens, and several therapeutic drugs, by conjugation with glutathione. This enzyme also plays a significant role in the catabolism of phenylalanine and tyrosine. Several transcript variants of this gene encode multiple protein isoforms. GSTZ1 shows minimal glutathione-conjugating activity with ethacrynic acid and 7-chloro-4-nitrobenz-2-oxa-1,3-diazole and maleylacetoacetate isomerase activity. It has low glutathione peroxidase activity with T butyl and cumene hydroperoxides and is able to catalyze the glutathione dependent oxygenation of dichloroacetic acid to glyoxylic acid. Highest expression in liver followed by kidney, skeletal muscle and brain. Also expressed in melanocytes, synovium, placenta, breast and fetal liver and heart.

Additional Information

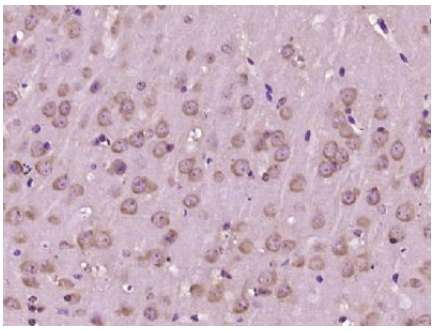
Gene ID	2954
Other Names	Maleylacetoacetate isomerase, MAAI, 5.2.1.2, GSTZ1-1, Glutathione S-transferase zeta 1, 2.5.1.18, GSTZ1, MAAI
Target/Specificity	Mostly expressed in liver followed by kidney, skeletal muscle and brain. Also

	expressed in melanocytes, synovium, placenta, breast and fetal liver and heart.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	GSTZ1
Synonyms	MAAI
Function	Bifunctional enzyme showing minimal glutathione-conjugating activity with ethacrynic acid and 7-chloro-4-nitrobenz-2-oxa-1,3- diazole and maleylacetoacetate isomerase activity. Also has low glutathione peroxidase activity with T-butyl and cumene hydroperoxides. Is able to catalyze the glutathione dependent oxygenation of dichloroacetic acid to glyoxylic acid.
Cellular Location	Cytoplasm.
Tissue Location	Mostly expressed in liver followed by kidney, skeletal muscle and brain. Also expressed in melanocytes, synovium, placenta, breast and fetal liver and heart

Images



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MAAI) Polyclonal Antibody, Unconjugated (AP55159) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.