

GSTA3 Rabbit pAb

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Catalog # AP52274

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q16772
Reactivity	Rat, Human, Mouse
Predicted	Pig, Dog, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25302
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GSTA3
Epitope Specificity	131-222/222
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	Cytoplasm.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes are involved in cellular defense against toxic, carcinogenic, and pharmacologically active electrophilic compounds. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. Glutathione S-transferase A3 (GSTA3) belongs to the alpha class genes that are located in a cluster mapped to chromosome 6. Genes of the alpha class are highly related and encode enzymes with glutathione peroxidase activity. However, during evolution, this alpha class gene diverged accumulating mutations in the active site that resulted in differences in substrate specificity and catalytic activity. GSTA3 catalyzes the double bond isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones.

Additional Information

Gene ID	2940
Other Names	Glutathione S-transferase A3, 2.5.1.18, GST class-alpha member 3, Glutathione S-transferase A3-3, GSTA3 (HGNC:4628)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	GSTA3 (HGNC:4628)
Function	Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Catalyzes isomerization reactions that contribute to the biosynthesis of steroid hormones. Efficiently catalyze obligatory double-bond isomerizations of delta(5)-androstene-3,17-dione and delta(5)-pregnene-3,20-dione, precursors to testosterone and progesterone, respectively. Has substantial activity toward aflatoxin B1-8,9-epoxide (By similarity).
Cellular Location	Cytoplasm.

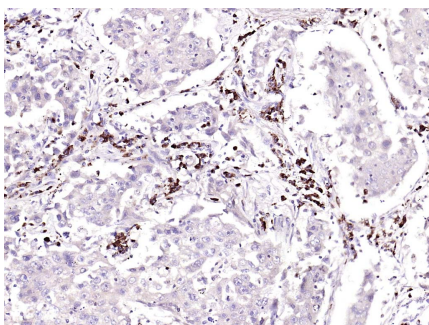
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References

Suzuki T.,et al.Genomics 18:680-686(1993).
Johansson A.-S.,et al.J. Biol. Chem. 276:33061-33065(2001).
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Board P.G.,et al.Biochem. J. 330:827-831(1998).

Images



Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); 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 (GSTA3) Polyclonal Antibody, Unconjugated (AP52274) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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