

GSTA3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11861a

Specification

GSTA3 Antibody (N-term) - Product Information

WB,E Application **Primary Accession** 016772 Other Accession NP 000838.3 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 25302 Antigen Region 1-30

GSTA3 Antibody (N-term) - Additional Information

Gene ID 2940

Other Names

Glutathione S-transferase A3, GST class-alpha member 3, Glutathione S-transferase A3-3, GSTA3

Target/Specificity

This GSTA3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GSTA3.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

GSTA3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GSTA3 Antibody (N-term) - 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).

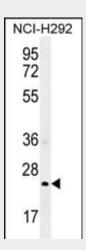
Cellular Location Cytoplasm.

GSTA3 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

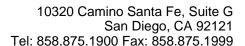
GSTA3 Antibody (N-term) - Images



GSTA3 Antibody (N-term) (Cat. #AP11861a) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the GSTA3 antibody detected the GSTA3 protein (arrow).

GSTA3 Antibody (N-term) - Background

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. This gene encodes a glutathione S-tranferase belonging 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. The enzyme encoded by this gene catalyzes the double bond isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones. An additional transcript variant has been identified, but its full length sequence has not been determined.

GSTA3 Antibody (N-term) - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Tars, K., et al. J. Mol. Biol. 397(1):332-340(2010)
Moyer, A.M., et al. Cancer Epidemiol. Biomarkers Prev. 19(3):811-821(2010)
Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)
Starr, J.M., et al. Mech. Ageing Dev. 129(12):745-751(2008)