

## Goat Anti-GST3 / GSTP1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1513a

#### Specification

## Goat Anti-GST3 / GSTP1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>P09211</u> <u>NP\_000843</u>, <u>2950</u> Human Mouse, Rat, Dog, Cow Goat Polyclonal 100ug/200ul IgG 23356

### Goat Anti-GST3 / GSTP1 Antibody - Additional Information

Gene ID 2950

**Other Names** Glutathione S-transferase P, 2.5.1.18, GST class-pi, GSTP1-1, GSTP1, FAEES3, GST3

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**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** Goat Anti-GST3 / GSTP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Goat Anti-GST3 / GSTP1 Antibody - Protein Information

Name GSTP1 (<u>HGNC:4638</u>)

Synonyms FAEES3, 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:<a href="http://www.uniprot.org/citations/9084911" target="\_blank">9084911</a>). Participates in the formation of novel hepoxilin regioisomers



(PubMed:<a href="http://www.uniprot.org/citations/21046276" target="\_blank">21046276</a>). Negatively regulates CDK5 activity via p25/p35 translocation to prevent neurodegeneration.

## **Cellular Location**

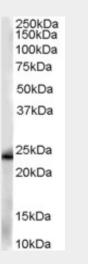
Cytoplasm. Mitochondrion. Nucleus. Note=The 83 N-terminal amino acids function as un uncleaved transit peptide, and arginine residues within it are crucial for mitochondrial localization

#### Goat Anti-GST3 / GSTP1 Antibody - Protocols

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

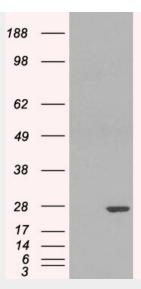
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Goat Anti-GST3 / GSTP1 Antibody - Images



AF1513a (0.01  $\mu$ g/ml) staining of human kidney lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





HEK293 overexpressing GSTP1 (RC203086) and probed with AF1513a (mock transfection in first lane), tested by Origene.

# Goat Anti-GST3 / GSTP1 Antibody - Background

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.

## Goat Anti-GST3 / GSTP1 Antibody - References

Maternal Nrf2 and gluthathione-S-transferase polymorphisms do not modify associations of prenatal tobacco smoke exposure with asthma and lung function in school-aged children. Henderson AJ, et al. Thorax, 2010 Oct. PMID 20805158.

Evidence that polymorphic deletion of the glutathione s-transferase gene, GSTM1, is associated with esophageal atresia. Filonzi L, et al. Birth Defects Res A Clin Mol Teratol, 2010 Aug 25. PMID 20740495.

Association of glutathione S-transferase (GSTM1, T1 and P1) gene polymorphisms with type 2 diabetes mellitus in north Indian population. Bid HK, et al. J Postgrad Med, 2010 Jul-Sep. PMID 20739761.

Association of Glutathione S-Transferase, EPHX, and p53 codon 72 Gene Polymorphisms with Adult Acute Myeloid Leukemia. Chauhan PS, et al. DNA Cell Biol, 2010 Aug 23. PMID 20731606. Betel quid chewing as an environmental risk factor for breast cancer. Kaushal M, et al. Mutat Res, 2010 Aug 20. PMID 20728566.