

GSTT1/4 Polyclonal Antibody

Catalog No: YT2084

Reactivity: Human; Rat; Mouse;

Applications: WB;ELISA

Target: GSTT1/4

Fields: >>Glutathione metabolism;>>Metabolism of xenobiotics by cytochrome

P450;>>Drug metabolism - cytochrome P450;>>Drug metabolism - other enzymes;>>Metabolic pathways;>>Platinum drug resistance;>>Pathways in cancer;>>Chemical carcinogenesis - DNA adducts;>>Chemical carcinogenesis -

receptor activation;>>Chemical carcinogenesis - reactive oxygen

species;>>Hepatocellular carcinoma;>>Fluid shear stress and atherosclerosis

Gene Name: GSTT1/GSTT4

Protein Name: Glutathione S-transferase theta-1/Glutathione S-transferase theta-4

Human Gene Id: 2952

Human Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

GSTT1/4. AA range:10-59

P30711/A8MPT4

Specificity: GSTT1/4 Polyclonal Antibody detects endogenous levels of GSTT1/4 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 30kD

Cell Pathway: Glutathione metabolism;Metabolism of xenobiotics by cytochrome P450;Drug

metabolism;

Background: The protein encoded by this gene, glutathione S-transferase (GST) theta 1

(GSTT1), is a member of a superfamily of proteins that catalyze the conjugation of reduced glutathione to a variety of electrophilic and hydrophobic compounds. Human GSTs can be divided into five main classes: alpha, mu, pi, theta, and zeta. The theta class includes GSTT1, GSTT2, and GSTT2B. GSTT1 and GSTT2/GSTT2B share 55% amino acid sequence identity and may play a role in human carcinogenesis. The GSTT1 gene is haplotype-specific and is absent from

38% of the population. Alternative splicing of this gene results in multiple

transcript variants. [provided by RefSeq, Sep 2015],

Function : catalytic activity:RX + glutathione = HX + R-S-glutathione.,function:Conjugation

of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Acts on 1,2-epoxy-3-(4-nitrophenoxy)propane, phenethylisothiocyanate 4-nitrobenzyl chloride and 4-nitrophenethyl bromide. Displays glutathione peroxidase activity with cumene hydroperoxide., online

information: The Singapore human mutation and polymorphism

database,polymorphism:The GSTT1 gene is absent from 38% of the population. The presence or absence of the GSTT1 gene is coincident with the conjugator (GSST1+) and non-conjugator (GSTT1-) phenotypes respectively. The GSTT1+

phenotype can catalyze the glutathione conjugation of

dichloromethane., similarity: Belongs to the GST superfamily. Theta

family., similarity: Contains 1 GST C-terminal domain., similarity: Contains 1 GST N-

terminal domain., subunit: Homodimer., tissue s

Subcellular Location:

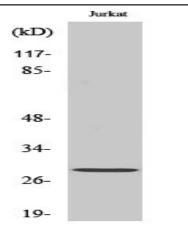
Cytoplasm.

Expression:

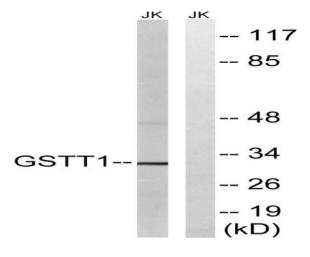
Found in erythrocyte. Expressed at low levels in liver. In lung, expressed at low levels in Clara cells and ciliated cells at the alveolar/bronchiolar junction. Absent

from epithelial cells of larger bronchioles.

Products Images



Western Blot analysis of various cells using GSTT1/4 Polyclonal Antibody



Western blot analysis of lysates from Jurkat cells, using GSTT1/4 Antibody. The lane on the right is blocked with the synthesized peptide.