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GSTT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12899A

Product Information

Application	WB, FC, E
Primary Accession	P30711
Other Accession	A8MPT4, NP_000844.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20137
Calculated MW	27335
Antigen Region	7-34

Additional Information

Gene ID	2952
Other Names	Glutathione S-transferase theta-1, GST class-theta-1, Glutathione transferase T1-1, GSTT1
Target/Specificity	This GSTT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-34 amino acids from the N-terminal region of human GSTT1.
Dilution	WB~~1:1000 FC~~1:10~50 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	GSTT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GSTT1
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.
Cellular Location	Cytoplasm.
Tissue Location	Found in erythrocyte. Expressed at low levels in liver. In lung, expressed at low levels in club cells and ciliated cells at the alveolar/bronchiolar junction. Absent from epithelial cells of larger bronchioles.

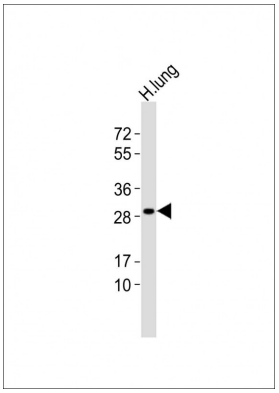
Background

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 and GSTT2. The GSTT1 and GSTT2 share 55% amino acid sequence identity and both of them were claimed to have an important role in human carcinogenesis. The GSTT1 gene is located approximately 50kb away from the GSTT2 gene. The GSTT1 and GSTT2 genes have a similar structure, being composed of five exons with identical exon/intron boundaries.

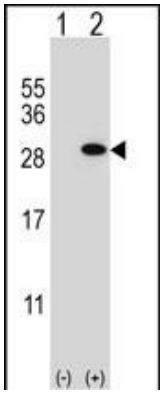
References

Palli, D., et al. Mutagenesis 25(6):569-575(2010)
Henderson, A.J., et al. Thorax 65(10):897-902(2010)
Filonzi, L., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(9):743-747(2010)
Smith, G., et al. Pharmacogenet. Genomics (2010) In press :
Bid, H.K., et al. J Postgrad Med 56(3):176-181(2010)

Images

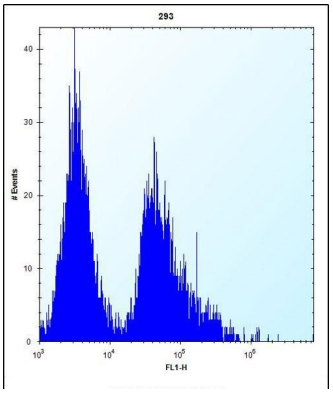


Anti-GSTT1 Antibody (N-term)at 1:2000 dilution + human lung lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of GSTT1 (arrow) using rabbit polyclonal GSTT1 Antibody (N-term) (Cat. #AP12899a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GSTT1 gene.

GSTT1 Antibody (N-term) (Cat. #AP12899a) flow



cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.