

GSTM5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12728a

Product Information

Application IHC-P, FC, WB, E

Primary Accession P46439 Other Accession NP 000842.2 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB32354 Calculated MW 25675 14-43 **Antigen Region**

Additional Information

Gene ID 2949

Other Names Glutathione S-transferase Mu 5, GST class-mu 5, GSTM5-5, GSTM5

Target/Specificity This GSTM5 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 14-43 amino acids from the N-terminal

region of human GSTM5.

Dilution IHC-P~~1:100~500 FC~~1:10~50 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 GSTM5 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name GSTM5

Function Conjugation of reduced glutathione to a wide number of exogenous and

endogenous hydrophobic electrophiles.

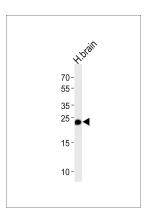
Background

Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. 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-transferase that belongs to the mu class. The mu class of enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 and are known to be highly polymorphic. These genetic variations can change an individual's susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. Diversification of these genes has occurred in regions encoding substrate-binding domains, as well as in tissue expression patterns, to accommodate an increasing number of foreign compounds.

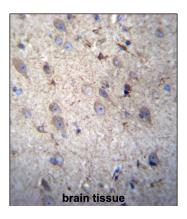
References

Wang, Y., et al. J. Hum. Genet. 55(8):490-494(2010) Yu, K.D., et al. Breast Cancer Res. Treat. 121(2):485-496(2010) Davila, S., et al. Genes Immun. 11(3):232-238(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)

Images

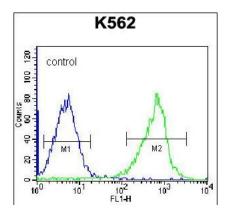


Western blot analysis of lysate from human brain tissue lysate, using GSTM5 Antibody (N-term)(Cat. #AP12728a). AP12728a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



GSTM5 Antibody (N-term) (Cat. #AP12728a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GSTM5 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

GSTM5 Antibody (N-term) (Cat. #AP12728a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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