

Product datasheet for PH302097

GSTM4 (NM_000850) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	GSTM4 MS Standard C13 and N15-labeled recombinant protein (NP_000841)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC202097
Predicted MW:	25.6 kDa
Protein Sequence:	>RC202097 protein sequence Red=Cloning site Green=Tags(s) MSMTLGWDIRGLAHAIRLLLEYTDSSYEEKKYTMGDAPDYDRSQWLNEKFKLGLDFPNLPYLIDGAHKI TQSNAILCYIARKHNLCGETEEKIRVDILENQAMDVSNQLARVCYSPDFEKLKPEYLEELPTMMQHFSQ FLGKRPWFVGDKITFVDFLAYDVLDLHRIFEPNCLDAFPNLKDFISRFEGLKISAYMKSSRFLPKPLYT RVAVWGNK TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000841
RefSeq Size:	1441
RefSeq ORF:	654
Synonyms:	GSTM4-4; GTM4
Locus ID:	2948
UniProt ID:	Q03013 , A0A140VKE3



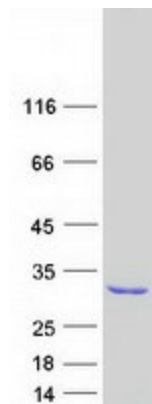
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Cytogenetics: 1p13.3

Summary: 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. Multiple transcript variants, each encoding a distinct protein isoform, have been identified. [provided by RefSeq, Jul 2008]

Protein Pathways: Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450

Product images:



Coomassie blue staining of purified GSTM4 protein (Cat# [TP302097]). The protein was produced from HEK293T cells transfected with GSTM4 cDNA clone (Cat# [RC202097]) using MegaTran 2.0 (Cat# [TT210002]).