

## Product datasheet for **AR50421PU-N**

### **GSTM5 (1-218, His-tag) Human Protein**

#### Product data:

Product Type:	Recombinant Proteins
Description:	GSTM5 (1-218, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSHPMTLG YWDIRGLAHA IRLLEYTDS SYVEKKYTLG DAPDYDRSQW LNEKFKLGLD FPNLPYLIDG AHKITQSNAI LRYIARKHNL CGETEEEEKIR VDILENQVMD NHMELVRLCY DPDFEKLKPK YLEELPEKLYSEFLGKRP WFAGDKITFV DFLAYDVLDM KRIFEPKCLD AFLNLKDFIS RFEGLKKISA YMKSSQFLRG LLFGKSATWN SK
Tag:	His-tag
Predicted MW:	28.2 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 10% glycerol, 1 mM DTT
Preparation:	Liquid purified protein
Protein Description:	Recombinant human GSTM5 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_000842</a>
Locus ID:	2949
UniProt ID:	<a href="#">P46439</a> , <a href="#">Q5T8R2</a>
Cytogenetics:	1p13.3
Synonyms:	GSTM5-5; GTM5



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**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. [provided by RefSeq, Jul 2008]

**Protein Pathways:**

Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450

**Product images:**