

# **Product datasheet for AR09587PU-N**

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OriGene Technologies, Inc.

### GSTM4 (1-218, His-tag) Human Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** GSTM4 (1-218, His-tag) human recombinant protein, 0.1 mg

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** MGSSHHHHHH SSGLVPRGSH MSMTLGYWDI RGLAHAIRLL LEYTDSSYEE KKYTMGDAPD

or AA Sequence: YDRSQWLNEK FKLGLDFPNL PYLIDGAHKI TQSNAILCYI ARKHNLCGET EEEKIRVDIL

ENQAMDVSNQ LARVCYSPDF EKLKPEYLEE LPTMMQHFSQ FLGKRPWFVG DKITFVDFLA

YDVLDLHRIF EPNCLDAFPN LKDFISRFEG LEKISAYMKS SRFLPKPLYT RVAVWGNK

Tag: His-tag

Predicted MW: 27.7 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 1 mM DTT, 10% glycerol, 50 mM

NaCl

**Preparation:** Liquid purified protein

**Protein Description:** Recombinant human GSTM4 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 up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**RefSeq:** NP 000841

**Locus ID:** 2948

UniProt ID: <u>Q03013</u>, <u>A0A140VKE3</u>

Cytogenetics: 1p13.3

**Synonyms:** GSTM4-4; GTM4





#### **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:**

