

## Product datasheet for PH304624

### GSTA3 (NM\_000847) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	GSTA3 MS Standard C13 and N15-labeled recombinant protein (NP_000838)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC204624
Predicted MW:	25.3 kDa
Protein Sequence:	>RC204624 protein sequence Red=Cloning site Green=Tags(s)  MAGKPKLHYFNGRGRMEPIRWLLAAAGVEFEEKFIGSAEDLGKLRNDGSLMFQQVPMVEIDGKLVQTRA ILNYIASKYNLYGKDIKERALIDMYTEGMADLNEMILLPLCRPEEKDAKIALIKEKTKSRYFPAFEKVL QSHGQDYLVGNKLSRADISLVELLYVEELDSSLISNFPLLKALKTRISNLPTVKKFLQPGSPRKPADA KALEEARKIFRF  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- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-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:	<a href="#">NP_000838</a>
RefSeq Size:	915
RefSeq ORF:	666
Synonyms:	GSTA3-3; GTA3
Locus ID:	2940
UniProt ID:	<a href="#">Q16772</a>



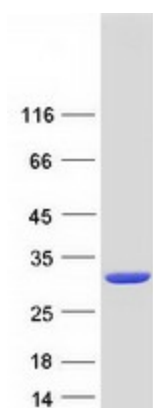
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**Cytogenetics:** 6p12.2

**Summary:** Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes are involved in cellular defense against toxic, carcinogenic, and pharmacologically active electrophilic compounds. 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 belonging to the alpha class genes that are located in a cluster mapped to chromosome 6. Genes of the alpha class are highly related and encode enzymes with glutathione peroxidase activity. However, during evolution, this alpha class gene diverged accumulating mutations in the active site that resulted in differences in substrate specificity and catalytic activity. The enzyme encoded by this gene catalyzes the double bond isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones. An additional transcript variant has been identified, but its full length sequence has not been determined. [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 GSTA3 protein (Cat# [TP304624]). The protein was produced from HEK293T cells transfected with GSTA3 cDNA clone (Cat# [RC204624]) using MegaTran 2.0 (Cat# [TT210002]).