

Product datasheet for TP304624L

OriGene Technologies, Inc.

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GSTA3 (NM_000847) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human glutathione S-transferase alpha 3 (GSTA3), 1 mg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC204624 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAGKPKLHYFNGRGRMEPIRWLLAAAGVEFEEKFIGSAEDLGKLRNDGSLMFQQVPMVEIDGIKLVQTRA ILNYIASKYNLYGKDIKERALIDMYTEGMADLNEMILLLPLCRPEEKDAKIALIKEKTKSRYFPAFEKVL

QSHGQDYLVGNKLSRADISLVELLYYVEELDSSLISNFPLLKALKTRISNLPTVKKFLQPGSPRKPPADA

KALEEARKIFRF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 25.1 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 000838

Locus ID: 2940

UniProt ID: Q16772



RefSeq Size:

915

Cytogenetics: 6p12.2 RefSeq ORF: 666

Synonyms: GSTA3-3; GTA3

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

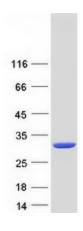
isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones. An additional transcript variant has been identified, but its full length

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]).