

Product datasheet for **RC204624L4V**

GSTA3 (NM_000847) Human Tagged ORF Clone Lentiviral Particle

Product data:

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|---------------------------|--|
| Product Type: | Lentiviral Particles |
| Product Name: | GSTA3 (NM_000847) Human Tagged ORF Clone Lentiviral Particle |
| Symbol: | GSTA3 |
| Synonyms: | GSTA3-3; GTA3 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_000847 |
| ORF Size: | 666 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC204624). |
| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| RefSeq: | NM_000847.3 |
| RefSeq Size: | 915 bp |
| RefSeq ORF: | 669 bp |
| Locus ID: | 2940 |
| UniProt ID: | Q16772 |
| Cytogenetics: | 6p12.2 |
| Protein Pathways: | Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450 |



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MW: 25.3 kDa

Gene 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]