

Product datasheet for RC223332L2V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

GSTM1 (NM_000561) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: GSTM1 (NM_000561) Human Tagged ORF Clone Lentiviral Particle

Symbol: GSTM1

Synonyms: GST1; GSTM1-1; GSTM1a-1a; GSTM1b-1b; GTH4; GTM1; H-B; MU; MU-1

Mammalian Cell

Selection:

None

Vector: pLenti-C-mGFP (PS100071)

Tag: mGFP

ACCN: NM_000561

ORF Size: 654 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC223332).

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: <u>NM 000561.2</u>

 RefSeq Size:
 1161 bp

 RefSeq ORF:
 657 bp

 Locus ID:
 2944

 UniProt ID:
 P09488

 Cytogenetics:
 1p13.3

Domains: GST_N, GST_C

Protein Families: Druggable Genome





GSTM1 (NM_000561) Human Tagged ORF Clone Lentiviral Particle - RC223332L2V

Protein Pathways: Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by

cytochrome P450

MW: 25.5 kDa

Gene 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. Null mutations of this class mu gene have been linked with an increase in a number of cancers, likely due to an increased susceptibility to environmental toxins and carcinogens. Multiple protein isoforms are encoded by transcript variants of this gene. [provided by RefSeq, Jul 2008]