

OriGene Technologies, Inc.

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Product datasheet for SC306283

Glutathione Transferase zeta 1 (GSTZ1) (NM_145871) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glutathione Transferase zeta 1 (GSTZ1) (NM_145871) Human Untagged Clone
Tag:	Tag Free
Symbol:	GSTZ1
Synonyms:	GSTZ1-1; MAAI; MAAID; MAI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC306283 representing NM_145871. Blue=Insert sequence Red=Cloning site Green=Tag(s)
	GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCATGCAGGCGGGGAAGCCCATCCTCTTATTCCTATTTCCGAAGCTCCTGCTCATGGAGAGTTCGAATTGCTCTGGCCTTGAAAGGCATCGACTACGAGACGGTGCCCATCAATCTCATAAAGGATGGGGGGCCAACAGTTTTCTAAGGACTTCCAGGCACTGAATCCTATGAAGCAGGTGCCAACCCTGAAGATTGATGGAATCACCATTCACCAGTCAAACCTGTCTGTCCTGAAGCAAGTGGGAGAGGAGATGCAGCTGACCTGGGCCCAGAACGCCATCACTTGTGGCTTTAACGCCCTGGAGCAGATCCTACAGAGCACAGCGGGCATATACTGTGTAGGAGACGAGGTGACCATGGCTGATCTGTGCTTGGTGCCTCAGGTGGCCAAATGCTGAAAGATTCAAGGTGGATCTCACCCCCTACCATCAGCTCCATCAACAAGAGGCTGCTGGTCTTGGAGGCCTTCCAGGTGGTCTCACCCCTGCCGGCAGCCAGATACCCACTGAGCTGAGGGCCTAGACGCGTACGCGCCGCCCGAGCAGAACTCATCTCAGAAGAGCTCGCGCAGCAAATGATATCCTGGATTACAAGGATGACGATAAAGGTTTAAACGGCCGGC
Restriction Sites:	Sgfl-Mlul
Plasmid Map:	
ACCN:	NM_145871
Insert Size:	525 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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ORIGENE Glutat	hione Transferase zeta 1 (GSTZ1) (NM_145871) Human Untagged Clone – SC306283
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM 145871.2</u>
RefSeq Size:	1269 bp
RefSeq ORF:	525 bp
Locus ID:	2954
UniProt ID:	<u>043708</u>
Cytogenetics:	14q24.3
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Tyrosine metabolism
MW:	19.4 kDa
Gene Summary:	This gene is a member of the glutathione S-transferase (GSTs) super-family which encodes multifunctional enzymes important in the detoxification of electrophilic molecules, including carcinogens, mutagens, and several therapeutic drugs, by conjugation with glutathione. This enzyme catalyzes the conversion of maleylacetoacetate to fumarylacetoacatate, which is one of the steps in the phenylalanine/tyrosine degradation pathway. Deficiency of a similar gene in mouse causes oxidative stress. Several transcript variants of this gene encode multiple protein isoforms. [provided by RefSeq, Jul 2015] Transcript Variant: This variant (2) lacks an alternate in-frame exon, compared to variant 1, resulting in a shorter protein (isoform 2), compared to isoform 1.

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