

OriGene Technologies, Inc.

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Product datasheet for TL304183

Glutathione S Transferase alpha 1 (GSTA1) Human shRNA Plasmid Kit (Locus ID 2938)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Glutathione S Transferase alpha 1 (GSTA1) Human shRNA Plasmid Kit (Locus ID 2938)
Locus ID:	2938
Synonyms:	GST-epsilon; GST2; GSTA1-1; GTH1
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	GSTA1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2938). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>NM 001319059</u> , <u>NM 145740, NM 145740.1, NM 145740.2</u> , <u>NM 145740.3, NM 145740.4,</u> <u>BC053578, BC110891, BM973137, NM 145740.5</u>
UniProt ID:	<u>P08263</u>
Summary:	This gene encodes a member of a family of enzymes that function to add glutathione to target electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins, and products of oxidative stress. This action is an important step in detoxification of these compounds. This subfamily of enzymes has a particular role in protecting cells from reactive oxygen species and the products of peroxidation. Polymorphisms in this gene influence the ability of individuals to metabolize different drugs. This gene is located in a cluster of similar genes and pseudogenes on chromosome 6. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u> . If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .



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Performance	OriGene guarantees that the sequences in the shRNA expression cassettes are verified to
Guaranteed:	correspond to the target gene with 100% identity. One of the four constructs at minimum are
	guaranteed to produce 70% or more gene expression knock-down provided a minimum

correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

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