

OriGene Technologies, Inc.

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Product datasheet for TR311768

Lactate Dehydrogenase B (LDHB) Human shRNA Plasmid Kit (Locus ID 3945)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Lactate Dehydrogenase B (LDHB) Human shRNA Plasmid Kit (Locus ID 3945)
Locus ID:	3945
Synonyms:	HEL-S-281; LDH-B; LDH-H; LDHBD; TRG-5
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	LDHB - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 3945). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM 001174097, NM 002300, NM 001315537, NM 002300.1, NM 002300.2, NM 002300.3, NM 002300.3, NM 002300.4, NM 002300.5, NM 002300.6, NM 002300.7, NM 001174097.1, NM 001174097.2, BC015122, BC015122.1, BC002362, BC022835, BC071860</u>
UniProt ID:	<u>P07195</u>
Summary:	This gene encodes the B subunit of lactate dehydrogenase enzyme, which catalyzes the interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD+ in a post-glycolysis process. Alternatively spliced transcript variants have been found for this gene. Recent studies have shown that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is localized in the peroxisomes. Mutations in this gene are associated with lactate dehydrogenase B deficiency. Pseudogenes have been identified on chromosomes X, 5 and 13. [provided by RefSeq, Feb 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 Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to 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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