

Product datasheet for TR314837

OriGene Technologies, Inc.

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ALDH5A1 Human shRNA Plasmid Kit (Locus ID 7915)

Product data:

Product Type: shRNA Plasmids

Product Name: ALDH5A1 Human shRNA Plasmid Kit (Locus ID 7915)

Locus ID: 7915

SSADH; SSDH Synonyms:

Vector: pRS (TR20003)

E. coli Selection: **Ampicillin** Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

ALDH5A1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

7915). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

NM 001080, NM 170740, NM 001080.1, NM 001080.2, NM 001080.3, NM 170740.1, RefSeq:

BC034321, BC034321.1, NM 001368954

UniProt ID: P51649

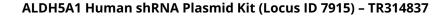
Summary: This protein belongs to the aldehyde dehydrogenase family of proteins. This gene encodes a

> mitochondrial NAD(+)-dependent succinic semialdehyde dehydrogenase. A deficiency of this enzyme, known as 4-hydroxybutyricaciduria, is a rare inborn error in the metabolism of the neurotransmitter 4-aminobutyric acid (GABA). In response to the defect, physiologic fluids from patients accumulate GHB, a compound with numerous neuromodulatory properties. Two transcript variants encoding distinct isoforms have been identified for this gene.

[provided by RefSeq, Jul 2008]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.





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).