

Product datasheet for RC210726L4V

OriGene Technologies, Inc.

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P5CS (ALDH18A1) (NM_002860) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: P5CS (ALDH18A1) (NM 002860) Human Tagged ORF Clone Lentiviral Particle

Symbol: P5CS

Synonyms: ADCL3; ARCL3A; GSAS; P5CS; PYCS; SPG9; SPG9A; SPG9B

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_002860 **ORF Size:** 2385 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC210726).

Sequence:

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

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.

RefSeg: NM 002860.3

 RefSeq Size:
 3470 bp

 RefSeq ORF:
 2388 bp

 Locus ID:
 5832

 UniProt ID:
 P54886

 Cytogenetics:
 10q24.1

Domains: aakinase, aldedh

Protein Families: Druggable Genome





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Protein Pathways: Arginine and proline metabolism, Metabolic pathways

MW: 87.3 kDa

Gene Summary: This gene is a member of the aldehyde dehydrogenase family and encodes a bifunctional

ATP- and NADPH-dependent mitochondrial enzyme with both gamma-glutamyl kinase and gamma-glutamyl phosphate reductase activities. The encoded protein catalyzes the reduction of glutamate to delta1-pyrroline-5-carboxylate, a critical step in the de novo biosynthesis of

proline, ornithine and arginine. Mutations in this gene lead to hyperammonemia, hypoornithinemia, hypocitrullinemia, hypoargininemia and hypoprolinemia and may be associated with neurodegeneration, cataracts and connective tissue diseases. Alternatively spliced transcript variants, encoding different isoforms, have been described for this gene.

[provided by RefSeq, Jul 2008]