

Product datasheet for RC210726L3

OriGene Technologies, Inc.

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P5CS (ALDH18A1) (NM_002860) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: P5CS (ALDH18A1) (NM_002860) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: P5CS

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

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

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

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_002860

ORF Size: 2385 bp





P5CS (ALDH18A1) (NM_002860) Human Tagged Lenti ORF Clone - RC210726L3

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 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.

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: 1. Centrifuge at 5,000xg for 5min.

10q24.1

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. 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 002860.3</u>

 RefSeq Size:
 3470 bp

 RefSeq ORF:
 2388 bp

 Locus ID:
 5832

 UniProt ID:
 P54886

Cytogenetics:

Domains: aakinase, aldedh
Protein Families: Druggable Genome

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

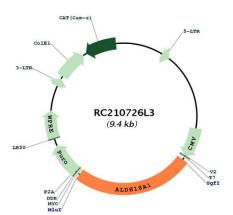
proline, ornithine and arginine. Mutations in this gene lead to hyperammonemia,

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]



Product images:



Circular map for RC210726L3