

Product datasheet for **SC318873**

Adenylosuccinate Lyase (ADSL) (NM_001123378) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adenylosuccinate Lyase (ADSL) (NM_001123378) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADSL
Synonyms:	AMPS; ASASE; ASL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC318873 representing NM_001123378. Blue=Insert sequence Red=Cloning site Green=Tag(s)

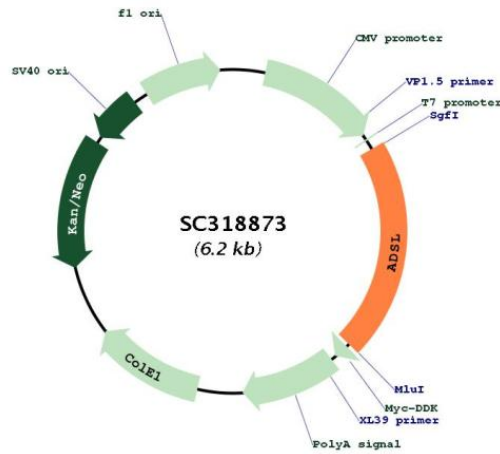
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_001123378

Insert Size: 1278 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.
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: [NM_001123378.2](#)

RefSeq Size: 1580 bp

RefSeq ORF: 1278 bp

Locus ID: 158

UniProt ID:	P30566
Cytogenetics:	22q13.1
Protein Families:	Druggable Genome
Protein Pathways:	Alanine, aspartate and glutamate metabolism, Metabolic pathways, Purine metabolism
MW:	48.3 kDa
Gene Summary:	<p>The protein encoded by this gene belongs to the lyase 1 family. It is an essential enzyme involved in purine metabolism, and catalyzes two non-sequential reactions in the de novo purine biosynthetic pathway: the conversion of succinylaminoimidazole carboxamide ribotide (SAICAR) to aminoimidazole carboxamide ribotide (AICAR) and the conversion of adenylosuccinate (S-AMP) to adenosine monophosphate (AMP). Mutations in this gene are associated with adenylosuccinase deficiency (ADSLD), a disorder marked with psychomotor retardation, epilepsy or autistic features. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2015]</p> <p>Transcript Variant: This variant (2) lacks the penultimate, in-frame coding exon compared to variant 1. The resulting isoform (b) is shorter, missing an internal protein segment compared to isoform a.</p>