

Product datasheet for SC302322

Argininosuccinate Lyase (ASL) (NM_001024944) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Argininosuccinate Lyase (ASL) (NM_001024944) Human Untagged Clone
Tag:	Tag Free
Symbol:	ASL
Synonyms:	ASAL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC302322 representing NM_001024944. Blue=Insert sequence Red=Cloning site Green=Tag(s)

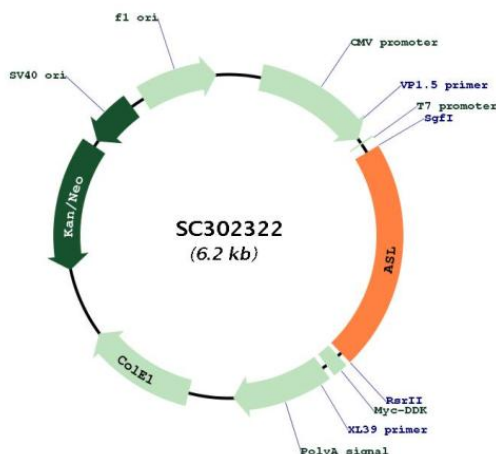
```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCCTCGGAGAGTGGGAAGCTTTGGGGTGGCCGGTTTGTGGGTGCAGTGGACCCCATCATGGAGAAG
TTCAACCGCTCCATTGCCTACGACCCGGCACCTTTGGGAGGTGGATGTTCAAGGCAGCAAAGCCTACAGC
AGGGGCCCTGGAGAAGGCAGGGCTCCTCACCAAGGCCGAGATGGACCAGATACTCCATGGCCTAGACAAG
GTGGCTGAGGAGTGGGCCAGGGCACCTTCAAACCTGAACCTCAATGATGAGGACATCCACACAGCCAAT
GAGCGCCGCTGAAGGAGCTCATTGGTGAACGGCAGGGAAGCTGCACACGGGACGGAGCCGGAATGAC
CAGGTGGTCACAGACCTCAGGCTGTGGATGCGGCAGACCTGCTCCACGCTCTCGGGCCTCCTCTGGGAG
CTATTAGGACCATGGTGGATCGGGCAGAGGCGGAACGTGATGTTCTTCCCGGGTACACCCATTG
CAGAGGGCCAGCCATCCGCTGGAGCCACTGGATTCTGAGCCACGCCGTGGCACTGACCCGAGACTCT
GAGCGGCTGCTGGAGGTGCGGAAGCGGATCAATGTCTGCCCTGGGGAGTGGGGCCATTGCAGGCAAT
CCCCTGGGTGGACCGAGAGCTGCTCCGAGCAGAAGCAACTTTGGGGCCATCACTCTCAACAGCATG
GATGCCACTAGTGAAGCGGACTTTGTGGCCGAGTTCTGTTCTGGGCTTCGCTGTGCATGACCCATCTC
AGCAGGATGGCCGAGGACCTCATCCTCTACTGCACCAAGGAATTCAGCTTCGTGCAGCTCTCAGATGCC
TACAGCACGGGAAGCAGCCTGATGCCCCAGAAGAAAAACCCGACAGTTTGGAGCTGATCCGGAGCAAG
GCTGGGCGTGTGTTTGGGCGGGAGGACAAGGAAGCTGTGTTTGAAGTGTGAGACTATGATGCCCCTG
CTCCAGGTGGCCACTGGGCTCATCTCTACGCTGCAGATTCACCAAGAGAACATGGGACAGGCTCTCAGC
CCCACATGCTGGCCACTGACCTTGCTATTACCTGGTCCGCAAAGGGATGCCATTCCGCCAGGCCAC
GAGGCTCCGGGAAAGCTGTGTTTCATGGCCGAGACCAAGGGGTGCGCCTCAACCAGCTGTCACTGCAG
GAGCTGCAGACCATCAGCCCCCTGTTCTCGGGCAGCTGATCTGCGTGTGGGACTACGGGCACAGTGTG
GAGCAGTATGGTCCCTGGGCGGCACTGCGCGCTCCAGCGTCGACTGGCAGATCCGCCAGGTGCGGGCG
CTACTGCAGGCACAGCAGGCCTAG
AGCGGACCGACGCTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGAT
ATCCTGGATTACAAGGATGACGACGATAAGGTTTAA
```



[View online »](#)

Restriction Sites: SgfI-RsrII

Plasmid Map:



ACCN: NM_001024944

Insert Size: 1335 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_001024944.1](#)

RefSeq Size: 2001 bp

RefSeq ORF: 1335 bp

Locus ID: 435

UniProt ID: [P04424](#)

Cytogenetics:	7q11.21
Protein Pathways:	Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways
MW:	49.5 kDa
Gene Summary:	<p>This gene encodes a member of the lyase 1 family. The encoded protein forms a cytosolic homotetramer and primarily catalyzes the reversible hydrolytic cleavage of argininosuccinate into arginine and fumarate, an essential step in the liver in detoxifying ammonia via the urea cycle. Mutations in this gene result in the autosomal recessive disorder argininosuccinic aciduria, or argininosuccinic acid lyase deficiency. A nontranscribed pseudogene is also located on the long arm of chromosome 22. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (3) lacks an alternate, in-frame exon, compared to variant 1, resulting in a shorter protein (isoform 2).</p>