

Product datasheet for **SC322186**

Argininosuccinate Lyase (ASL) (NM_001024943) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Argininosuccinate Lyase (ASL) (NM_001024943) Human Untagged Clone
Tag:	Tag Free
Symbol:	Argininosuccinate Lyase
Synonyms:	ASAL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for SC322186
 GCGCGACACTATCCGTGCGGCCAGGCGGAGACCCGGAGGACCGAAGCTTCCGGACGACGA
 GGAACCGCCCAACATGGCCTCGGAGAGTGGGAAGCTTTGGGGTGGCCGGTTTGTGGGTGC
 AGTGGACCCCATCATGGAGAAGTTCAACGCGTCCATTGCCTACGACCCGGCACCTTTGGGA
 GGTGGATGTTCAAGGCAGCAAAGCTACAGCAGGGCCTGGAGAAGGCAGGGCTCCTCAC
 CAAGGCCGAGATGGACCAGATACTCCATGGCCTAGACAAGGTGGCTGAGGAGTGGGCCCA
 GGGCACCTTCAAAGTGAAGTCAATGATGAGGACATCCACACAGCCAATGAGCGCCGCT
 GAAGGAGCTCATTGGTGCAACGGCAGGGAAGCTGCACACGGGACGGAGCCGGAATGACCA
 GGTGGTACAGACCTCAGGCTGTGGATGCGGCAGACCTGCTCCACGCTCTCGGGCCTCT
 CTGGGAGCTCATTAGGACCATGGTGGATCGGGCAGAGGCGGAACGTGATGTTCTCTTCCC
 GGGGTACACCCATTTGCAGAGGGCCAGCCATCCGCTGGAGCCACTGGATTCTGAGCCA
 CGCCGTGGCACTGACCCGAGACTCTGAGCGGCTGCTGGAGGTGCGGAAGCGGATCAATGT
 CCTGCCCTGGGAGTGGGGCCATTGCAGGCAATCCCCTGGGTGTGGACCGAGAGCTGCT
 CCGAGCAGAACTCAACTTTGGGGCCATCACTCTCAACAGCATGGATGCCACTAGTGAGCG
 GGACTTTGTGGCCGAGTTCTGTCTGGGCTTCGCTGTGCATGACCCATCTCAGCAGGAT
 GGCCGAGGACCTCATCTACTGCACCAAGGAATTCAGTTCGTGCAGCTCTCAGATGC
 CTACAGCACGGGAAGCAGCCTGATGCCCCAGAAGAAAAACCCCGACAGTTTGAGAGCTGAT
 CCGGAGCAAGGCTGGGCGTGTGTTGGGCGGTGTGCCGGGCTCCTGATGACCCCTCAAGGG
 ACTTCCCAGCACCTACAACAAAGACTTACAGGAGGACAAGGAAGCTGTGTTTGAAGTGC
 AGACACTATGAGTGCCGTGCTCCAGGTGGCCACTGGCGTCATCTCTACGCTGCAGATTCA
 CCAAGAGAACATGGGACAGGCTCTCAGCCCCGACATGCTGGCCACTGACCTTGCCTATTA
 CCTGGTCCGCAAAGGGATGCCATTCCGCCAGGCCACGAGGCCTCCGGGAAAGCTGTGTT
 CATGGCCGAGACCAAGGGGTGCGCCCTCAACCAGCTGTCACTGCAGGAGCTGCAGACCAT
 CAGCCCCCTGTTCTCGGGCGACGTGATCTGCGTGTGGGACTACGGGCACAGTGTGGAGCA
 GTATGGTGCCCTGGGCGGCACTGCGCGCTCCAGCGTCTGACTGGCAGATCCGCCAGGTGCG
 GGCGCTACTGCAGGCACAGCAGGCTAGGTCTCCACACCTGCCCCCTAATAAAGTGGG
 CGCGAGAGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
 AAA

Restriction Sites: Please inquire

ACCN: NM_001024943

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:	<ol style="list-style-type: none">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:	<u>NM_001024943.1</u> , <u>NP_001020114.1</u>
RefSeq Size:	2061 bp
RefSeq ORF:	1395 bp
Locus ID:	435
UniProt ID:	<u>P04424</u>
Cytogenetics:	7q11.21
Protein Pathways:	Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways
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 (1) represents the longest transcript. Variants 1 and 2 encode the longest isoform (1).</p>