

## Product datasheet for **SC323829**

### ALAS2 (NM\_001037967) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ALAS2 (NM_001037967) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALAS2
Synonyms:	ALAS-E; ALASE; ANH1; ASB; SIDBA1; XLDPP; XLEPP; XLSA
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 NM\_001037967.1  
 AGGGCCCACATGCCTTGGCCCCACATACCAACCCAGGCTGCTGTGACAGCCCATGAGAGG  
 GGGAGAGGTTGCTCTGGGATGGAACAAGAAAAAGAGGTTGTTTTGTGAGGACTTTAGGTT  
 CAAGATGGTGACTGCAGCCATGCTGCTACAGTGTGCCAGTGTGCCCCGGGGCCCCAC  
 AAGCCTCTAGGCAAGGTGGTTAAGACTCACCAGTTCCTGTTTGGTATTGGACGTGTCC  
 CATCCTGGCTACCAAGGACCAAACTGTCTCAAATCCACCTTAAGGCAACAAAGGCTGG  
 AGGAGATTCTCCATCTTGGGCGAAGGGCCACTGTCCCTTCATGCTGTCCGAACTCCAGGA  
 TGGGAAGAGCAAGATTGTGCAGAAGGCAGCCCCAGAAAGTCCAGGAAGATGTGAAGGCTTT  
 CAAGACAGGAAACTATGTCTTCAGTTATGACCAGTTTTTCAGGGACAAGATCATGGAGAA  
 GAAACAGGATCACACCTACCGTGTGTTCAAGACTGTGAACCGCTGGGCTGATGCATATCC  
 CTTTGCCCAACATTTCTCTGAGGCATCTGTGGCCTCAAAGGATGTGTCCGTCTGGTGTAG  
 TAATGATTACCTGGGCATGAGCCGACACCCTCAGGTCTTGCAAGCCACACAGGAGACCCT  
 GCAGCGTCATGGTGTGGAGCTGGTGGCACCCGCAACATCTCAGGCACCAGTAAGTTTCA  
 TGTGGAGCTTGAGCAGGAGCTGGCTGAGCTGCACCAGAAGGACTCAGCCCTGCTCTTCTC  
 CTCTGCTTTGTTGCCAATGACTCTACTCTTTCACCTTGCCCAAGATCCTGCCAGGGTG  
 CGAGATTTACTCAGACGCAGGCAACCATGCTTCCATGATCCAAGGTATCCGTAACAGTGG  
 AGCAGCCAAGTTTGTCTTCAGGCACAATGACCCTGACCACCTAAAAGAACTTCTAGAGAA  
 GTCTAACCCCTAAGATACCCAAAATTGTGGCCTTTGAGACTGTCCACTCCATGGATGGTGC  
 CATCTGTCCCCTCGAGGAGTTGTGTGATGTGTCCCACCAGTATGGGGCCCTGACCTTCGT  
 GGATGAGGTCCATGCTGTAGGACTGTATGGGTCCCAGGGCGCTGGGATTGGGGAGCGTGA  
 TGGAAATTATGCATAAGATTGACATCATCTGGAACCTTTGGCAAGGCCTTTGGCTGTGT  
 GGGCGGTACATTGCCAGCACCCGTGACTTGGTGGACATGGTGGCTCCTATGCTGCAGG  
 CTTCTACTTTACCCTTCTCTGCCCCCATGGTGTCTCTGGAGCTCTAGAATCTGTGCG  
 GCTGCTCAAGGGAGAGGAGGGCCCAAGCCCTGAGGCGAGCCACCAGCGCAATGTCAAGCA  
 CATGCGCCAGCTACTCATGGACAGGGGCTTCTGTCATCCCCTGCCCCAGCCACATCAT  
 CCCCATCCGGGTGGGCAATGCAGCACTCAACAGCAAGCTCTGTGATCTCCTGCTCTCAA  
 GCATGGCATCTATGTGCAGGCCATCAACTACCAACTGTCCCCGGGGTGAAGAGCTCCT  
 GCGCTTGGCACCCCTCCCCCACCACAGCCCTCAGATGATGGAAGATTTTGTGGAGAAGCT  
 GCTGCTGGCTTGGACTGCGGTGGGGCTGCCCTCCAGGATGTGTCTGTGGCTGCCTGCAA  
 TTTCTGTGCGCTCCTGTACACTTTGAGCTCATGAGTGTGGGAAACGTTCTACTTCGG  
 GAACATGGGGCCCAAGTATGTCACCACCTATGCCTGAGAAGCCAGCTGCCTAGGATTCAC  
 ACCCCACCTGCGCTTCACTTGGGTCCAGGCCTACTCCTGTCTTCTGCTTTGTTGTGTGCC  
 TCTAGCTGAATTGAGCCTAAAAATAAAGCACAAACCACAACAAAAAAAAAAAAAAAAAAAA  
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** ECoRI-NOT

**ACCN:** NM\_001037967

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001037967.1</a> , <a href="#">NP_001033056.1</a>
<b>RefSeq Size:</b>	1830 bp
<b>RefSeq ORF:</b>	1653 bp
<b>Locus ID:</b>	212
<b>UniProt ID:</b>	<a href="#">P22557</a>
<b>Cytogenetics:</b>	Xp11.21
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Glycine, serine and threonine metabolism, Metabolic pathways, Porphyrin and chlorophyll metabolism
<b>Gene Summary:</b>	<p>The product of this gene specifies an erythroid-specific mitochondrially located enzyme. The encoded protein catalyzes the first step in the heme biosynthetic pathway. Defects in this gene cause X-linked pyridoxine-responsive sideroblastic anemia. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1, resulting in an isoform (b) that is shorter than isoform a.</p>