

Product datasheet for **SC333486**

LIAS (NM_001278592) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: LIAS (NM_001278592) Human Untagged Clone
Tag: Tag Free
Symbol: LIAS
Synonyms: HGCLAS; HUSSY-01; LAS; LIP1; LS; PDHLD
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >SC333486 representing NM_001278592.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

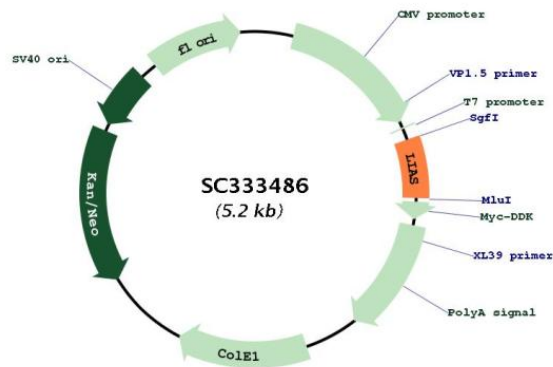
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GTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTCTCTACGCTGCGGGGATGCAGCCCGACCCTGGGGCCCGGGTATTTGGGAGATATTTTGCAGC
CCAGTCAGACCGTTAAGCTCCTTGCCAGATAAAAAAAGGAACTCCTACAGAATGGACCAGACCTCAA
GATTTTGTATCTGGTATCTTGCAGACAGGAGCACCTGGGATGAATATAAAGGAAACCTAAACGCCAG
AAAGGAGAAAGGTATGTGAGGAAGCTCGATGTCCCAATATTGGAGAGTGTGGGGAGGTGGAGAATAG
CCACCGCCACAGCCACGATCATGGTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_001278592

Insert Size: 303 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).

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:	<u>NM_001278592.1</u>
RefSeq Size:	610 bp
RefSeq ORF:	303 bp
Locus ID:	11019
UniProt ID:	<u>O43766</u>
Cytogenetics:	4p14
Protein Pathways:	Lipoic acid metabolism, Metabolic pathways
MW:	11.4 kDa
Gene Summary:	<p>The protein encoded by this gene belongs to the biotin and lipoic acid synthetases family. Localized in the mitochondrion, this iron-sulfur enzyme catalyzes the final step in the de novo pathway for the biosynthesis of lipoic acid, a potent antioxidant. The deficient expression of this enzyme has been linked to conditions such as diabetes, atherosclerosis and neonatal-onset epilepsy. Alternative splicing occurs at this locus, and several transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Aug 2020]</p> <p>Transcript Variant: This variant (5) lacks several exons and its transcription extends past a splice site that is used in variant 1, resulting in a novel 3' coding region and 3' UTR, compared to variant 1. The resulting isoform (5) is much shorter and has a distinct C-terminus, compared to isoform 1.</p>