

## Product datasheet for **RG211439**

### **SUCLG1 (NM\_003849) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SUCLG1 (NM\_003849) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** SUCLG1  
**Synonyms:** GALPHA; MTDPS9; SUCLA1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG211439 representing NM\_003849  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACCGCAACCCTTGCCGCTGCCGCTGACATCGCTACCATGGTCTCCGGCAGCAGCGCCCTCGCCGCCG  
CCCGTCTCCTGTCGCGCAGCTTCTCCTGCCGAGAATGGAATTCGGCATTGTTCTACACAGCTTCTCG  
GCAACATCTCTATGTTGATAAAAAACAAAGATTATTTGCCAGGGTTTCACTGGCAAACAGGGCACCTTT  
CACAGCCAGCAGGCATTGGAATATGGCACAAACTCGTTGGAGGAACCACTCCAGGGAAAGGAGGCCAGA  
CACATCTGGGCTTACCTGTCTTTAATACTGTGAAGGAGGCCAAAGAACAGACAGGAGCAACGGCTTCTGT  
CATTTATGTTCTCCGCCTTTTGTCTGCTGCCATTAATGAAGCTATTGAGGCAGAAAATCCCTTGTT  
GTGTGTATCACTGAAGGAATTCACAGCAGGACATGGTACGAGTCAAGCACAACACTGCTGCGCCAGGAAA  
AGACAAGGCTAATTGGGCCCAACTGCCCTGGAGTCATCAATCCTGGAGAAATGTAATAATGGCATCATGCC  
TGGCCATATTCACAAAAAGGAAGGATTGGCATTGTGTCCAGATCTGGCACCCCTGACTTATGAAGCAGTT  
CACCAAACAACGCAAGTTGGATTGGGCGAGTCTTTGTGCGTTGGCATTGGAGGTGATCCTTTTAAATGGAA  
CAGATTTATTGACTGCCTCGAAATCTTTTGAACGATTCTGCCACAGAAGGCATCATATTGATTGGTGA  
AATTGGTGGTAATGCAGAAGAGAATGCTGCAGAATTTTGAAGCAACATAAATCAGTCCAATTTCAAG  
CCTGTAGTGTCTTATTGCTGGTTTAACTGCTCCTCCTGGGAGAAGAATGGGTGATGCCGGGCAATTA  
TTGCTGGAGAAAAGGTGGAGCTAAAGAGAAGATCTCTGCCCTTACAGAGTGCAGGAGTTGTGGTCAGTAT  
GTCTCCTGCACAGCTGGGAACCCAGATCTACAAGGAATTTGAAAAGAGGAAGATGCTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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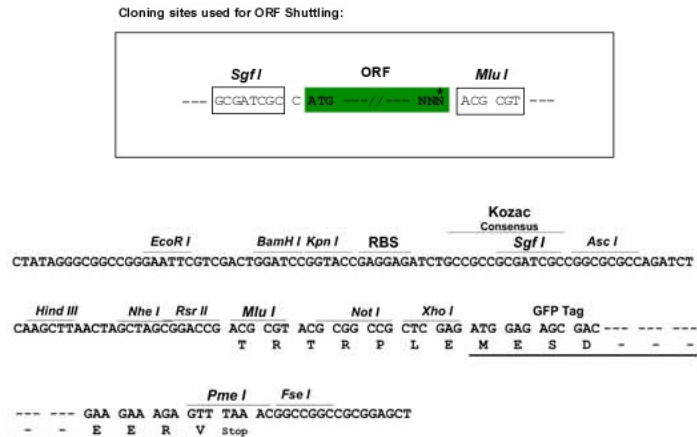
**Protein Sequence:** >RG211439 representing NM\_003849  
 Red=Cloning site Green=Tags(s)

MTATLAAAADIATMVSGSSGLAAARLLSRSFLLPQNGIRHCSYASRQHLVVDKNTKIICQGFTGKQGT  
 HSQQALEYGTKLVGGTTPGKGGQTHLGLPVFNTVKEAKEQTGATASVIYVPPFAAAAINEAIEAEIPLV  
 VCITEGIPQQDMVRVKHKLLRQEKTRLIGPNCPGVINPGECKIGIMPGHIIHKKGRIGIVSRSGTLTYEAV  
 HQTTQVGLGQSLCVGIGGDPFNGTDFIDCLEIFLND SATEGIILIGEIGNAEENAAEFLKQHNSGPNK  
 PVVSFIAGLTAPPGRRMGHAGAI IAGGKGGAKEKISALQSAGVVVSMSPAQLGTTIYKEFEKRKML

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003849

**ORF Size:** 1038 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_003849.4](#)

**RefSeq Size:** 1470 bp

**RefSeq ORF:** 1041 bp

**Locus ID:** 8802

**UniProt ID:** [P53597](#)

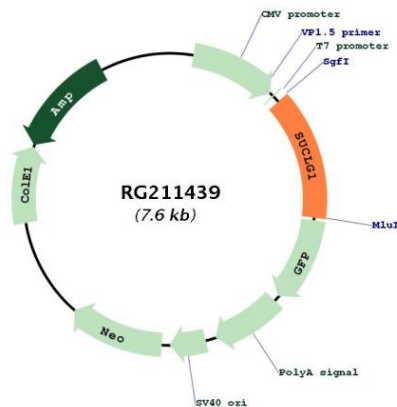
**Cytogenetics:** 2p11.2

**Domains:** CoA\_binding, ligase-CoA

**Protein Pathways:** Citrate cycle (TCA cycle), Metabolic pathways, Propanoate metabolism

**Gene Summary:** This gene encodes the alpha subunit of the heterodimeric enzyme succinate coenzyme A ligase. This enzyme is targeted to the mitochondria and catalyzes the conversion of succinyl CoA and ADP or GDP to succinate and ATP or GTP. Mutations in this gene are the cause of the metabolic disorder fatal infantile lactic acidosis and mitochondrial DNA depletion. [provided by RefSeq, Feb 2010]

**Product images:**



Circular map for RG211439