

## Product datasheet for **MG207743**

### **Adsl (NM\_009634) Mouse Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                     |
| Product Name:             | Adsl (NM_009634) Mouse Tagged ORF Clone |
| Tag:                      | TurboGFP                                |
| Symbol:                   | Adsl                                    |
| Synonyms:                 | Adl; Asl                                |
| Mammalian Cell Selection: | Neomycin                                |
| Vector:                   | pCMV6-AC-GFP (PS100010)                 |
| E. coli Selection:        | Ampicillin (100 ug/mL)                  |



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**ORF Nucleotide Sequence:**

>MG207743 representing NM\_009634  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGCATCCGGCGACCCCTGGCAGTGTGAAAGTTACCGTTCTCCGCTGGCGGCCGCTACGCCAGCC  
 GCGAGATGTGTTTCTTGTTCAGCGACAGGTACAAGTTCAGACGTGGCGGCAGCTGTGGCTGGCTGGC  
 GGAGGCCGAACAGACGCTGGGTTTGCTATCACAGATGAACAAATCCAGGAGATGAAGTCAACCTGAAC  
 AACATTGACTTCCAGATGGCAGCTGAGGAAGAGAAGCGCCTCGGCACGACGTGATGGCTCACGTGCACA  
 CGTTCCGGCCACTGCTGTCCGAAAGCTGCGGGCATTATTTCATCTGGGCGCCACCTCCTGCTATGTCGGAGA  
 CAATACGGACCTGATTATTCTGAGAAATGCATTTGACCTACTTTTGCCAAAGCTTGCTAGAGTGATCTCG  
 AGGCTTGGCGACTTTGCTAAGGATCGTGTGATCTGCCACGTTAGGTTTACACACTTTCAGCCTGCTC  
 AGCTGACCACGGTTGGGAAACGATGCTGCCTTTGGATTCAAGATCTCTGCATGGATCTCCAGAACTTGAA  
 GCGTGTCCGGGATGAGCTGCGCTTCCGAGGAGTAAAGGGCACCCTGGCACGCAGCCAGCTTCCGCGAG  
 CTCTTCGAGGGGGATCACCAGAAGGTGGAGCAGCTGGACAAGATGGTGACAGAAAAGGCAGGGTTTTAAAA  
 GAGCCTTCATCATCACAGGACAGACGTACACACGGAAAGTGGACATCGAAGTGTGTCTGTGCTGGCCAG  
 CTTAGGAGCATCGGTGCACAAGATTTGCACTGACATACGCCTGCTGGCAAACCTGAAGGAGATGGAGGAG  
 CCCTTTGAGAAACAGCAGATTGGCTCCAGTGGCATGCCGTACAAGCGGAACCCCATGCGCTCCGAACGTT  
 GCTGCAGCCTGGCCCGTCACTGATGGCCCTTACCATGGACCCACTACAGACAGCGTCTGTGCACTGGTT  
 TGAACGTACTCTGGATGACAGTGCCAACCGACGGATCTGTTTGGTGAAGCGTTTCTCACTGCAGATACT  
 ATATTAACACCCTACAGAACATTTCTGAAGGATTGGTGGTGTACCCCAAAGTAATTGAACGGCGCATT  
 GGCAAGAGCTGCCTTTTCATGGCCACAGAGAACATCATGGAATGGTGAAGCCGGGGGAGGAGTGAC  
 GGACTGCCATGAGAAAATTAGAGTGCTTTCCAGCAGGCAGCTGCTGTGGTCAAGCAGGAAGGAGGTGAC  
 AATGACCTTATAGAGCGCATCCGGGCGAGATGCCTACTTACGCCCATCCACTCACAGCTGGAGCACTTGC  
 TGGACCCCTCTTCTTCACTGGCCGAGCACCCAGCAGGTCCACAGATTCTGGAAGAGGAAGTGCGCC  
 CCTGCTAAAGCCCTATGGGAATGAGATGGCGGTGAAAGCAGAGCTGTGTCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207743 representing NM\_009634  
 Red=Cloning site Green=Tags(s)

MAASGDPGSAESYRSPLAARYASREMCFLFSDRYKFQTRQLWLWLAEEQTLGLPITDEQIQEMKSNLN  
 NIDFQMAAEEKRLRHDVMAHVHTFGHCCPKAAGIIHLGATSCYVDNTDLIILRNAFDLLLPLKARVIS  
 RLADFAKDRADLPTLGFTHFQPAQLTTVGKRCCLEWIQDLQNLKRVDELRFGRVGTGTGTQASFLQ  
 LFEGDHQKVEQLDKMVTEKAGFKRAFIIITGQTYTRKVDIEVLSVLASLGASVHKICTDIRLLANLKEMEE  
 PFQKQIGSSAMPYKRNPMRSECCSLARHLMALTMPLQTASVQWFERTLDDSANRRICLAEAFLTADT  
 ILNLTQNISEGLVVPKVIERRIRQELPFMATENIIMAMVKAGGSRQDCHEKIRVLSQQAADVVKQEGGD  
 NDLIERIRADAYFSPIHSQLEHLLDPSSFTGRAPQVHRFLEEEVRLPKPYGNEMAVKAECL

**TRTRPLE** - GFP Tag - V

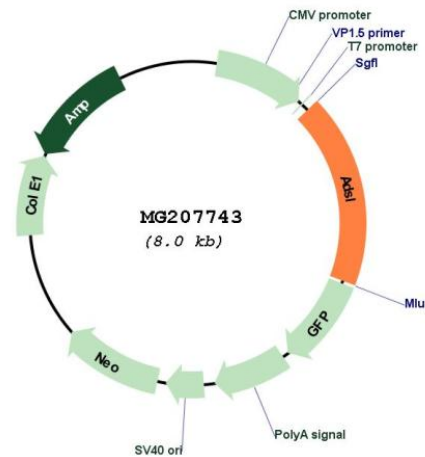
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_009634

ORF Size: 1452 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\\_009634.2](#)

**RefSeq Size:** 2115 bp

**RefSeq ORF:** 1455 bp

**Locus ID:** 11564

**UniProt ID:** [P54822](#)

**Cytogenetics:** 15 37.95 cM

**Gene Summary:** This gene encodes a protein that is involved in adenosine monophosphate (AMP) biosynthesis and maintaining AMP levels in the muscle. The encoded enzyme catalyzes the release of fumarate during AMP biosynthesis by cleaving the substrates succinylaminoimidazole carboxamide (SAICA) ribotide to give aminoimidazole carboxamide (AICA) ribotide, and adenylosuccinate to give adenylylate. In humans, this gene is associated with adenylosuccinate deficiency, a rare autosomal disorder resulting in a spectrum of neurological symptoms. A pseudogene associated with this gene is located on the X chromosome. [provided by RefSeq, Jan 2013]