

## Product datasheet for **MG210276**

### **Acsbg1 (NM\_053178) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Acsbg1 (NM_053178) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Acsbg1
Synonyms:	BG1; Bgm; E230019G03Rik; GR-LACS; Lpd; R75185
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG210276 representing NM\_053178  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCACGCGTTCTGAAGCAGGATACTGCTGTCTGTCCAGGACTCCAACATGCCTGACAGCAGAGATG  
 ATCAGCAGCAGGGGCCAGCTTGGGGACCTCCCAAGACAACCTCGCAAACAGCTCCTTAATTGATGGGCA  
 AACACTCTCCAAAGAGTCTCCAAGTCACGGTCTCGAGCTCTCAGCTCCAGAAAAGGCAAGGGCTGCCTCT  
 TTGGATGGTGCAGAGGAAGCACTATGGACAACCCGGGCGGATGGGAGAGTGCGCCTGCGCCTGGAACCTT  
 TCTGTACTCAGCGTCCCTATACCGTGCACCAGATGTTCTACGAGGCCCTAGATAAGTACGGGAACCTCAG  
 TGCTCTGGGCTTCAAGCGCAAGGACAAGTGGGAGCGTATCTCTTACTACCACTACTACCTGATTGCACGC  
 AAAGTAGCCAAAGGCTTCTTGAAGCTCGGCCTAGAGCGTCCACAGCGTGGCGATCCTTGGCTTCAACT  
 CTCCAGAAATGGTCTTCTCTGCAGTGGGCACAGTGTTCGACGGGGCATTGCTACTGGCATCTACACCAC  
 CAGCTCCCGGAGGCCTGCCAGTACATCTCTCATGACTGCCGAGCCAATGTCATCGTGGTTGACACACAG  
 AAGCAGCTGGAAGATCCTGAAGATCTGGAAGACTTGGCACATCTAAAGGCAGTGGTGATATACCAAG  
 AACCCCTCCAAAGAAGATGGCTAACGTGTACAGGATGGAGGAGCTCATAGAAGTGGGGCAAGAAGTGCC  
 TGAGGAGGCCCTAGATGCCATCATCGATACCCAGCAACCAACAGTGCCTGTGTGCTCGTCTACACATCA  
 GGCACCACGGGAAACCCCAAGGGTGTGATGCTGAGTCAAGACAATATCACATGGACAGCAGCGTATGGCA  
 GTCAGGCTGGGGACATCCAGCCAGCAGAAGTGCAGCAGGAGGTAGTGGTCAGTACTTGCCTCTCAGCCA  
 CATCGTCCCCAGATCTACGACCTGTGGACAGGCATCCAGTGGGGAGCCAGGTCTGCTTTCAGATCCG  
 GACGCCCTGAAGGGGACCCTGGTAAACACACTGCGGGAGGTGGAGCCACATCCACATGGGAGTGCCGC  
 GTGTGTGGGAGAAGATCATGGAAGGATCCAGGAGGTGGCCGCTCAGTCTGGCTTCCCGCCGAAGAT  
 GCTGCTGTGGCCATGTCAGTCACCTTGGAAACAGAACCTTACCTGCCCTAGCAATGACCTGAAGCCCTTC  
 ACCAGCAGACTGGCGGATTACCTAGTGTAGCCAGGGTCCGTCAGGCTCTGGGCTTTGCCAAGTGTGAGA  
 AAAACTTCTACGGAGCAGCTCCGATGACGGCAGAGACGCAGCGCTTCTTCTGGGCTCAACATCCGCT  
 GTATGCAGGCTATGGCCTCAGCGAGAGCACAGGCCCACTTTCATGTCCAGCCCCACAACATCGGCTT  
 TACAGCTCCGGCAGGGTGGTACCCGGCTGCCGGTGAAGCTGGTGAATCAGGATGCAGATGGCATCGGTG  
 AGATCTGCCTGTGGGGCCGACCATCTTATGGTTATCTGAACATGGAGGACAAAACCTGTGAGGCCAT  
 TGATTCCGAAGGCTGGCTGCACACAGGTGACATGGCCGCTGGATGCTGACGGCTTCTCTACATCACC  
 GGGCGCTCAAAGAATTAATCATCACTGCGGGCGGCGAGAACGTGCCCCAGTGCCTATCGAGGAGGCCG  
 TGAAGATGGAGCTGCCATCATCAGCAGTGCCATGCTGATCGGGGACCAGAGGAAGTTCCTGTCCATGCT  
 GCTAACCTGAAGTGCACGCTGGACCCAGAGACGTCTGAGCCTACAGACAGCCTGACCGAGCAAGCTGTG  
 GAGTTCTGCCAGCGGGTGGGCGAGCAAGGCCAGCACCGTCTCCGAGATCGTGGGGCAGAGAGACGAGGCTG  
 TGTACCAGGCCATTACGAAGGGATCCAGAGGGTGAACGCGAACGCCGACGCCGGCCCTACCACATCCA  
 GAAGTGGGCCATTCTCCAACGTGACTTCTCCATTTTCAGGTGGAGAAGTGGGACCCACCATGAAATTGAAA  
 CCGCTCACGGTTCTGGAGAAGTACAAAGATATCATCGATTCTTTTATCAAGAGCAAAAACAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - **GTTTAA**

**Protein Sequence:** >MG210276 representing NM\_053178  
 Red=Cloning site Green=Tags(s)

```

MPRGSEAGYCCLSRDSNMPDSRDDQQQGASLGTSDNSQTSSLIDGQTLKESPSHGLELSAPEKARAAS
LDGAEALWTRADGRVRLRLEPFCTQRPYTVHQMFYEALDKYGNLSALGFKRKDKWERISYYQYLIAR
KVAKGFLKGLERAHSVAILGFNSPEWFFSAVGTVFAGGIVTGIYTTSSPEACQYISHDCRANVIVDTQ
KQLEKILKIWKDLPHLKAVVIYQEPKPKMANVYTMEEIIELGQEVPEEALDAIIDTQQPNQCCVLVYTS
GTTGNPKGVMLSQDNITWTARYGSQAGDIQPAEVVQVSYLPLSHIAAQIYDLWTGIQWGAQVCFADP
DALKGTLVNTLREVEPTSHMGVPRVWEKIMERIQEVAAQSGFIRRKMLLWAMSVTLEQNLTCPSNDLKPF
TSRLADYLVLARVRQALGFAKQKQNFYGAAPMTAETQRFLLGNIRLYAGYGLSESTGPHFMSSPYNYRL
YSSGRVVPGCRVCLVNQDADGIGEICLWGRTIFMGYLNMEDKTCEAIDSEGWLHTGDMGRLDADGFLYIT
GRLKELIITAGGENVPPVPIEEAVKMLPIISSAMLIGDQRKFLSMLLTLKCTLDPETSEPTDSLTEQAV
EFCQRVGSKASTVSEIVGQRDEAVYQAIHEGIQRVNANAAARPYHIQKWAILQRDFSISGGELGPTMKLK
RLTVLEKYKDIIDSFYQEQQKQ
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_053178

**ORF Size:** 2163 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\\_053178.2](#), [NP\\_444408.1](#)

**RefSeq Size:** 2775 bp

**RefSeq ORF:** 2166 bp

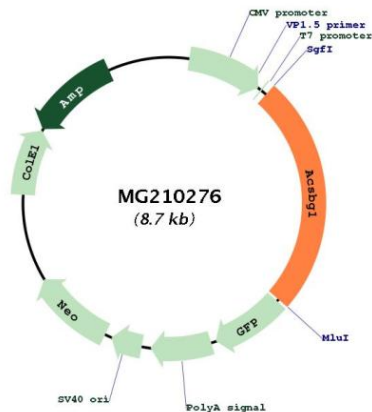
**Locus ID:** 94180

**UniProt ID:** [Q99PU5](#)

**Cytogenetics:** 9 A5.3

**Gene Summary:** Mediates activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Able to activate long-chain fatty acids. Can activate diverse saturated, monosaturated and polyunsaturated fatty acids (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG210276