

## Product datasheet for **RC203219**

### ACSBG1 (NM\_015162) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ACSBG1 (NM_015162) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACSBG1
Synonyms:	BG; BG1; BGM; GR-LACS; LPD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC203219 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGCCACGCAATTCTGGAGCTGGATACGGCTGCCACACGGGACCCAGCATGCTGGACAGCAGAGAGA  
CCCCACAGGAGAGCCGGCAGGACATGATTGTGAGGACCACCAAGAAAAATTGAAAACCAGCTCACTGAC  
TGACAGGCAGCCACTCTCCAAAGAGTCCCTGAACCATGCTCTCGAGCTCTCAGTGCCAGAGAAGGTGAAT  
AATGCCAGTGGGATGCTCCAGAGGAGGCGCTGTGGACGACTCGGGCCGATGGGCGGTGCGCCTGCGCA  
TAGACCCAGCTGCCACAGTTCCTACACTGTGCATCGGATGTTCTACGAGGCCCTGGATAAGTATGG  
GGACCTCATCGCTTTGGCTTCAAGCGCCAGGACAAGTGGGAACACATCTCTACTCCCAATACTACCTG  
CTCGCCCGCAGAGCCCAAGGGCTTCTGAAGCTCGGCTGAAGCAGGCCACAGTGTGGCCATCTCG  
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CTACACCACAGCTCCCCAGAGGCTGCCAGTACATCGCTTATGACTGCTGCGCCAATGTCATCATGGTC  
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TATATAAAGAACCTCTCCAAACAAGATGGCCAATGTGTACACGATGGAGGAATTCATGGAGCTGGGAA  
TGAAGTGCTGAGGAAGCCCTGGACGCCATCATTGACACCAGCAGCCCAACCAGTGTGTGTGCTAGTC  
TACACTCCGGCACCACTGGGAACCCCAAGGGCGTGATGCTGAGTCAAGACAATATCACGTGGACGGCAC  
GGTACGGCAGCCAGGCCGGTGACATCCGGCCGGCAGAAGTCCAGCAGGAGGTGGTAGTCAGTACCTGCC  
CCTCAGCCATATTGCCGCCAGATCTACGACCTGTGGACAGGCATCCAGTGGGGGGCCAGGTTTGCTTT  
GCCGAACCCGACGCCCTGAAGGGGAGCCTGGTGAACACGCTGCGGGAGGTGGAGCCACATCACACATGG  
GGTGCCCGGGTATGGGAGAAGATCATGGAGCGCATCCAGGAGTGGCGGCTCAGTCTGGCTTCATCCG  
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AGTGTCAAAGAACTTCTATGGAGCGGCCCCATGATGGCAGAGACACAGCACTTCTTCTGGGTCTCAA  
CATCCGCTTGATGCGGGCTATGGCCTCAGTGAGACCTCAGGCCCCCACTTTCATGTCCAGTCCCTACAAC  
TACCGGCTGTACAGCTCAGGCAAGTTGGTGCCCGGCTGTCGGGTGAAGCTGGTGAACCAGGACGCAGAGG  
GCATTGGTGAGATCTGCCTGTGGGGCCGACCATATTCATGGGCTACCTGAACATGGAGGACAAGACTTG  
TGAGGCCATCGACGAGGAAGGCTGGCTGCACACGGGTGATGCTGGCCGCTGGACGCCGATGGCTTCCTC  
TACATCACTGGGCGCTCAAAGAATTAATCATCACAGCTGGTGGGAGAATGTGCCCCCTGTGCCATCG  
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GTCCATGCTGCTCACCTTGAAGTCACTCTGGACCCAGACACCTCTGACCAGACTGATAATCTGACTGAA  
CAAGCTGTGGAGTTCTGCCAGAGGGTGGGCAGCAGAGCCACCACAGTGTCCGAGATCATAGAGAAGAAGG  
ATGAGGCCGTGTACCAGGCCATCGAAGAGGGGATCCGGAGGGTCAACATGAACCGGGCGGCCCGCCCTA  
CCACATCCAGAAGTGGGCCATTCTCGAGAGAGACTTCTCCATTTCCGGTGGAGAGTTGGTCCCACGATG  
AAACTGAAACGGCTCACAGTTTTGGAGAAGTACAAAGGTATCATTGACTCCTTTTACCAAGAGCAAAAA  
TG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203219 protein sequence  
Red=Cloning site Green=Tags(s)

```
MPRNSGAGYGCPHGDPMSLDSRETPQESRQDMIVRTTQEKLKKTSSLTDRQPLSKESLNHALELSVPEKVN
NAQWDAPEEALWTRADGRVRLRIDPSCPQLPYTVHRMFYEALDKYGDLIAGFKRQDKWEHISYSQYYL
LARRAAKGFLKLGKQAHSVAILGFNSPEWFFSAVGTVFAGGIVTGIYTTSSPEACQYIAYDCCANVIMV
DTQKQLEKILKIWKQLPHLKAVVIYKEPPPNKMANVYTMEEFMELGNEVP EEALDAIIDTQQPNQCCVLV
YTSGTTGNPKGVMLSDNITWTARYGSQAGDIRPAEVQQEVVVSYLPLSHIAAQIYDLWTGIQWGAQVCF
AEPDALKGSLVNTLREVEPTSHMGVPRVWEKIMERIQEVAAQSGFIRRKMLLWAMSVTL EQNLTCPGSDL
KPFTTRLADYLVLAKVRQALGFAKQKNFYGAAPMAETQHFFLGLNIRLYAGYGLSETSGPHFMSSPYN
YRLYSSGKLVPGCRVKLVNQDAEGIGEICLWGRTIFMGYLNMEDKTCEAIDEEGWLHTGDAGRLDADGFL
YITGRKELIITAGGENVPPVPIEEAVKMELPIISNAMLIGDQRKFLSMLLTLCCTLDPDTSQDQTDNLTE
QAVEFCQRVGSRATTVSEIIIEKKDEAVYQAIIEGIRRVNMNAAARPYHIQKWAILERDFSISGGELGPTM
KLKRLTVLEKYKGIIDSFYEQKM
```

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6219\\_d04.zip](https://cdn.origene.com/chromatograms/mk6219_d04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

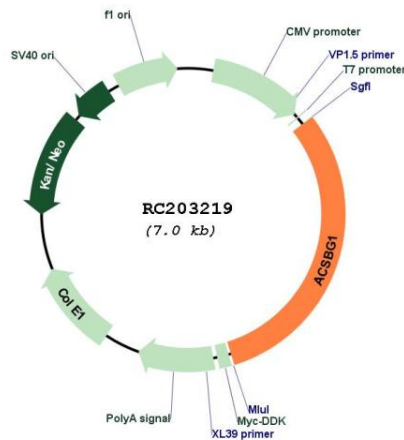
**ACCN:** NM\_015162

**ORF Size:** 2172 bp

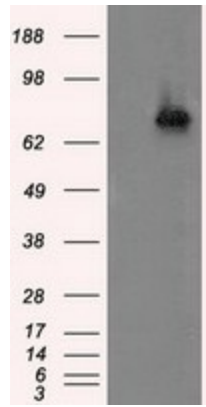
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

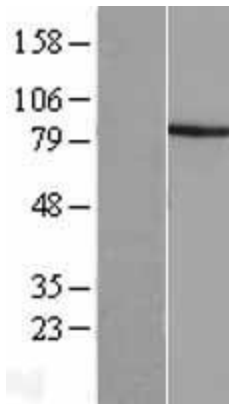
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</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>	<u><a href="#">NM_015162.2</a></u>
<b>RefSeq Size:</b>	3010 bp
<b>RefSeq ORF:</b>	2175 bp
<b>Locus ID:</b>	23205
<b>UniProt ID:</b>	<u><a href="#">Q96GR2</a></u>
<b>Cytogenetics:</b>	15q25.1
<b>Domains:</b>	AMP-binding
<b>MW:</b>	81.3 kDa
<b>Gene Summary:</b>	The protein encoded by this gene possesses long-chain acyl-CoA synthetase activity. It is thought to play a central role in brain very long-chain fatty acids metabolism and myelinogenesis. [provided by RefSeq, Jul 2008]

**Product images:**


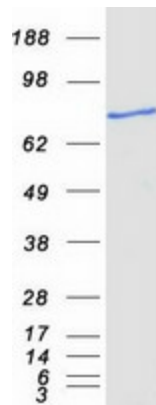
Circular map for RC203219



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACSBG1 (Cat# RC203219, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACSBG1(Cat# [TA501176]). Positive lysates [LY414754] (100ug) and [LC414754] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414754]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203219 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACSBG1 protein (Cat# [TP303219]). The protein was produced from HEK293T cells transfected with ACSBG1 cDNA clone (Cat# RC203219) using MegaTran 2.0 (Cat# [TT210002]).