

Product datasheet for **RC239262**

ACSBG2 (NM_001289178) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	ACSBG2
Synonyms:	BGR; BRGL; PRTD-NY3; PRTDNY3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC239262 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTGGAACCCAAAGACTCAAGAAGGAGCTAAAGATCTTGAAGTAGACATGAATAAAACAGAAGTTA
CTCCAGGCTGTGGACCACCTGTCGAGATGGAGAAGTCCTTCTGAGGCTATCCAAACACGGACCAGGCCA
TGAGACCCCGATGACCATCCCTGAATTTTTTCGAGAGTCAGTCAACCGATTGGAACTTATCCAGCCCTC
GCATCAAGAATGGCAAAAAGTGGGAAATCTGAATTTCAACCAGTACTATGAGGCTGTGCGGAAGGCTG
CAAAATCCTTGATCAAGCTGGGTTTGGAGCGTTTCACGGAGTTGGTATCCTGGGGTTAACTCTGCAGA
GTGGTTTATCACTGCTGTTGGTGCCATCCTAGCCGGGGTCTTTGTGTTGGTATTATGCCACCAACTCT
GCCGAGGCTTGTCATATGTCATCACTCATGCCAAAGTGAACATCTTGCTGGTTGAGAATGATCAACAGT
TACAGAAAATCCTTCGATTCCACAGAGCAGCCTAGAGCCCTAAAAGCGATCATCCAGTACAGACTGCC
AATGAAGAAGAACAACACTTGTACTCTTGGGATGATTTTATGGAACCTGGCAGAAGTATCCCTGACACC
CAACTGGAGCAGGTTCGAGAGCCAGAAGGCGAATCAATGCGCAGTGCCTCATCTACACTTCAGGGACCA
CAGGCATACCCAAGGGAGTGATGCTCAGTCATGACAACATCACGTGGATTGCAGGAGCAGTGACAAAGGA
CTTTAAACTGACAGACAAGCATGAGACGGTGGTAGCTACCTCCCACTCAGCCATATTGCAGCACAGATG
ATGGACATCTGGGTACCCATAAAGATTGGGGCGCTCACATACTTTGCTCAAGCAGATGCTCTCAAGGGCA
CCTTGGTAAGTACTCTAAAGGAGGTAACCACTACTGTCTTCATTGGAGTGCCTCAAAATTTGGGAGAAGAT
ACATGAGATGGTGAAGAAAAATAGTGCCAAGTCCATGGGCTTGAAGAAGAAGGCATTGCTGTGGGCAAGA
AACATTGGCTTCAAGGTCAACTCAAAAAAGATGTTGGGGAATATAATACTCCCGTGAGCTACCGCATGG
CTAAGACTCTCGTGTTCAGCAAAGTCAAGACATCCCTTGGCTTGGATCACTGTCACTCTTTATCAGTGG
GACTGCGCCCTCAACCAAGAGACTGCCGAGTTCTTTCTAAGCTTGGACATACCTATAGGCGAGTTGTAT
GGGTTGAGTGAGAGCTCGGGACCCACACGATATCCAACCAGAATAACTACAGGCTTCTAAGCTGTGGCA
AGATCTTGACTGGGTGTAAGAAATAGCTGTTCCAGCAGAACAAGGATGGCATTGGGGAGATCTGCCTCTG
GGTAGGCACATCTTATGGGCTATCTGGAAGTGAGACTGAACTACAGAGGCCATCGATGATGAAGGC
TGGCTACACTCTGGGGATCTGGGCCAGCTGGACGGTCTGGGTTTCTCTATGTCAACCGCCACATCAAAG
AAATCCTTATCACTGCTGGTGGTGAATGTGCCCCCATTCTGTTGAGACCTTGGTTAAGAAGAAGAT
CCCCATCATCAGTAACGCCATGTTAGTAGGAGATAAACTGAAGTTTCTGAGCATGTTGCTGACGCTGAAG
TGTGAGATGAATCAGATGAGCGGAGAACCCTGGACAAGCTGAACCTCGAGGCCATCAACTCTGTCTGGG
GTCTGGGCAGCCAGGCATCCACCGTGAAGTGTGAAGCAGCAAGACCCCTGGTCTACAAGGCCAT
CCAGCAAGGCATCAATGCTGTGAACCAGGAAGCCATGAACAATGCACAGAGGATTGAAAAGTGGGTATC
TTGGAGAAGGACTTTTCCATCTATGGTGGAGAGCTAGGTCCAATGATGAACTTAAGAGACATTTGTAG
CCCAGAAATACAAAAACAAATTGATCACATGTACCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239262 protein sequence
Red=Cloning site Green=Tags(s)

MTGTPKTEGAKDLEVDMNKTEVTPRLWTTCDRGEVLLRLSKHGPGETPMTIPEFFRESVNRFGTYPAL
ASKNGKKWEILNFNQYYEACRKAASLILGLERFHVGILGFNSAEWFIITAVGAILAGGLCVGIYATNS
AEACQYVITHAKVNILLVENDQQLQKILSIPQSSLEPLKAIQYRLPMKKNNLYSWDDFMELGRSIPDT
QLEQVIESQKANQCAVLIYTSGTTGIPKGVMLSHDNITWIAGAVTKDFKLTDKHETVVSYLPLSHIAAQM
MDIWVPIKIGALTYFAQADALGTLVSTLKEVKPTVFIGVPQIWEKIHVMKKNSAKSMGLKKKAFVWAR
NIGFKVNSKKMLGKYNTPVSYRMAKTLVFSKVKTSGLDHCHSFISGTAPLNQETAEFFFLSLDIPIGELY
GLSESGPHTISNQNNYRLSCGKILTGCKNMLFQKNKDGIEICLWGRHIFMGYLESETETTEIDDEG
WLHSGDLGLDGLGFLVYTGHIKEILITAGGENVPIPVETLVKKKIPIISNAMLVGDKLKFLSMLTLK
CEMNQMSGELDKLNFEAINFCRGLGSQASTVTEIVKQDPLVYKAIQQGINAVNQEAMNNAQRIEKWVI
LEKDFSIYGGELGPMMLKRHFVAQKYKKQIDHMYH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6692_a03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001289178

ORF Size: 1998 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.

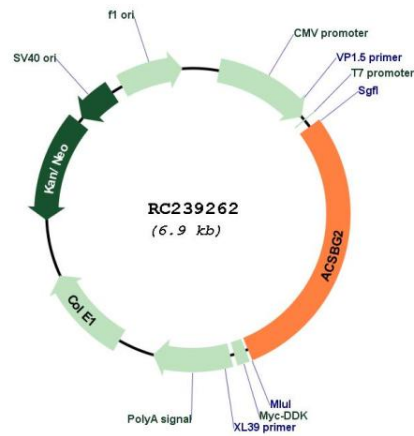
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001289178.1](#), [NP_001276107.1](#)

RefSeq Size:	2744 bp
RefSeq ORF:	2001 bp
Locus ID:	81616
UniProt ID:	Q5FVE4
Cytogenetics:	19p13.3
MW:	74.3 kDa

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. Also able to activate very long-chain fatty acids; however, the relevance of such activity is unclear in vivo. Has increased ability to activate oleic and linoleic acid. May play a role in spermatogenesis. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC239262