

## Product datasheet for **MG210004**

### **Acox2 (NM\_053115) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Acox2 (NM_053115) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Acox2
Synonyms:	THCCox
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG210004 representing NM\_053115  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGGAACCCAGGGGATCGAGTGTCACTGGGGGAGACCTGGAGCAGGGAAGTGCACCCTGACATAGACA  
GTGAAAGGCACTCCCGTCCTTCAGTGTGGAGCGGCTACCAACATCCTTGATGGAGGCATCCCAAACAC  
TGAGCTGCGGAGAAGAGTTGAAAGCCTCATCCAACGTGACCCAGTGTAAATTTGAAGCATCTTTACTTC  
ATGACCCGAGATGAGCTATATGAGGATGCGATTCAAAGAGATTCCATCTTGAGAAGCTAGCCTGGAGCC  
TGGGCTGGTCAGAAGACGGTCTGAACGCATTTATGCTGACAGAGTCTTGCTGGATATAACAACTTAAA  
CTTACATGGTATTGCCATGAATGCTATCAGAAGCCTGGGCTCAGATGAGCAGATTGCTAAATGGGGCCAA  
CTCGGCAAAAACCTCAAATCATACAACATATGCCAGACAGAGCTGGGACATGGGACATACCTGCAGG  
GCCTGGAGACCGAAGCAACCTATGATGCAACCACCCAGGAGTTTGTGATACACAGCCCTACAATGACTTC  
CATCAAGTGGTGGCCTGGGGACTTGGGACGGACAGTACCCATGTGTGGTCTAGCCCATTTGATCTGC  
TTAGGAGCCCGCATGGCATGCATGCCTTCATTGTGCCATCCGGAGCCTAGAGGACCACACCCCACTGC  
CAGGAATAACAGTTGGGGACATAGGCCCAAGATGGGCTTCGAAAACATAGACAATGGCTTCCTGCGACT  
GAACCAGTGAGGGTTCCAGAGAGAACATGCTCAGTCGCTTTGCAGAGGTCTTGCCAGATGGCACCTAC  
CAGAGGCTTGGGACACCAGAGCAATTATCTTGGCATGTTGGTGACACGGGTGCAGTGTGTATAAAG  
GATTCCTACCCACCTCCAGAAGCTTGCACCATTGCTGTGCGCTACGCGTAATCCGCCACCAAGTCTCG  
TCTTCGGCCTAGTACCCAGAGGCAAAAATCCTGGAATACCAGACACAGCAGCAGAAACTCCTGCCTCAG  
CTTGCTGTGAGCTATGCCTTGCATTTATGACCACAGCCTCTTACAATCTTCCACAGCTCCTACAGTG  
ATATTCTGAAGAGAGACTTCAGCCTCCTGCCTGAGCTCCATGCACTGAGCACTGGCATGAAGGCCATGTC  
TTCAGACTTCTGTGCCAGGGAACAGAGATCTGCCGACAGGCTGCGGGGGTCTGGCTACTCAAAGCTG  
AGCGGCCTACCGACTGGTCACTCAAGCGATAGCCTCTTGCACGTATGAGGGTGAGAATACGGTGTCTCT  
ACCTGCAAGTGGCCAGGTTTCTGATGAAGAGCTACCTGCAGGCTCAAGTGTCCCAAGATCCATACCACA  
GAAGCCTCTCCCTCAGTCCGTATGTATCTCGCCACACCAAGACCAGCCAGGTGCCAGCCAGACAGCA  
GCTGACTTCCGCTGCCAGAACTATACCACAGCCTGGGCATATGTGTCTGCCAGGCTCATAAGAGATG  
CAACACAGCATAACAGACCCTCATGATCCGGGTTGACCAGTACGATGCTTGAACCAAGACTTCTGT  
CATACACCTTCAGGCTGCTAAGGCTCACTGCTACTTCTCACTGTGAGGAATTTCAAGGAAGCTGTGGAG  
AAACTAGACAACGAACCAGAGATTCAGCGTGTGCTTCAAGAACTCTGTGACCTCTATGCCTTAAACGGTA  
TTCTGACTAACTCAGGGACTTTCTGCATGATGGCTTCTGTCTGGGGCCCAAGTGGACATGGCAAGAAC  
AGCCTTCCTAGACCTGCTTCCCTTGATCCGGAAGGACGCCATCTTGTTAACAGATGCTTTTGACTTCTCG  
GACCATTGTTTAAACTCTGCACTTGGCTGTTATGACGGACACGTCTACCAACGCCTGTTTGAGTGGGCTC  
AGAAGTCCCAGCCAATACTCAGGAGAACCCTGCCTATAAGAAGTATATTAGACCACTGATGCAAGCTG  
GAAACCAAGCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG210004 representing NM\_053115  
 Red=Cloning site Green=Tags(s)

MGNPGDRVSLGETWSREVHPDIDSERHSPSF SVERL TNILDGGIPNTELRRRVESLIQRDPVFNLKHL YF  
 MTRDEL YEDAVQKRFHLEKLAWSL GWSE DGP ERIYADRVLAGYNNLNLHGIAMNAIRSLGSDEQIAKWGQ  
 LGKNFQIIITTYAQTELGHGTYLQGLETEATYDATTQEFVIHSPTMTSIKWWPGDLGRTVTHAVVLAHLIC  
 LGARHGMHAFIVPIRSL EDHTPLPGITVGDIGPKMGFENIDNGFLRLNHVRVPRENMLSRFAEVL PDGTY  
 QRLGTPQSNYLGMLVTRVQLLYKGFLPTLQKACTIAVRYAVIRHQSRLRPSDPEAKILEYQTQQKLLPQ  
 LAVSYALHFMTTSLQLFFHSSYS DILK RDFSLLPELHALSTGMKAMSSDFCAQGT EICRRACGGHGYSKL  
 SGLPTLVTAIASCTYEGENTVLYLQVARFLMKS YLQAQVSPGSI PQKPLPQSVMYLATPRPARCPAQTA  
 ADFRCPEVYTTAWAYVSARLIRDATQHTQTLMRSGVDQYDAWNQTSVIHLQA AKAHCYFLTVRNFKEAVE  
 KLDNEPEIQRVLQNLCDLYALNGILTNSGDFLHDGFLSGAQVDMARTAFLDLLPLIRKDAILLTDAFDFS  
 DHCLNSALGCYDGHVYQRLFEWAQKSPANTQENPAYKKYIRPLMQSWKPKL

TRTRPLE - GFP Tag - V

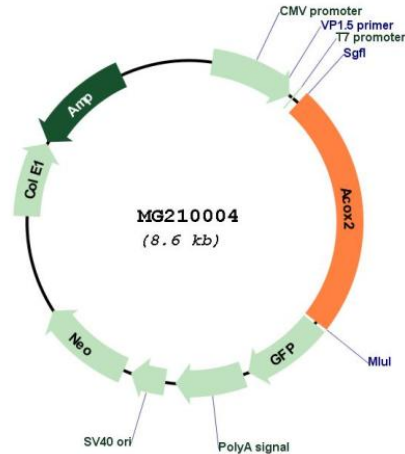
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_053115

**ORF Size:** 2570 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\\_053115.2](#), [NP\\_444345.2](#)

**RefSeq Size:** 2499 bp

RefSeq ORF:	2046 bp
Locus ID:	93732
UniProt ID:	<u><a href="#">Q9QXD1</a></u>
Cytogenetics:	14 A1
Gene Summary:	Oxidizes the CoA esters of the bile acid intermediates di- and tri-hydroxycoprostanic acids (By similarity). Capable of oxidizing short as well as long chain 2-methyl branched fatty acids (By similarity).[UniProtKB/Swiss-Prot Function]