

## Product datasheet for **MC216193**

### Cyp2c23 (NM\_001167905) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyp2c23 (NM_001167905) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Cyp2c23
Synonyms:	AW107714; b2b386Clo; BC034834; Cyp2c44
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC216193 representing NM\_001167905  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCTGCTGGGTCTCCCTACGTTGCTCTCCTGGTTTTGGTATGTCCCTCAGCCTCCTTTTCAGTGT  
 GGACAAAATGCGCACTGGGGGAGACTGCCCCCTGGCCCACTCCACTTCCATTATTGGGAATACT  
 GCAATTGGACCTCAAAGACATCCCTGCATCGCTTTCAGCTGGCCAAAGAGTATGGGCCTGTTTACACT  
 CTGTACTTTGGATCCTGGCCTACCGTGGTCTACATGGCTATGATGTGGTGAAGGAAGCGCTACTCAATC  
 AAGGTGATGAGTTCCTTGGGAGAGGACCTCGCCATTATCGAAGATAGCCAGAAGGGACATGGAATTGT  
 TTTTCAGTGAAGGAGAGAGGTGAAACTCCTGCGACGCTTCTCCCTCATGACGCTGAAGAACTTCGGAATG  
 GGAAGAGAAGCCTAGAGGAGAGGGTGCAGGAGGAAGCCCGTGCCTCGTGGAGGAGTTACATAAACAG  
 AAGCTCAGCCCTTGACCCACCTTCATCTGGCCTGTGCTCCCTGCAACGTGATCTGCTCCATCCTTTT  
 CAACGAGCGATTCCCATACAATGACAAGACATTCCTCAACCTCATGGACTTTTAAATAAAAATTTTAC  
 CAACTGAACTCTATATGGATCCAGATGTACAACCTATGGCCGACGATCATGAAGTACATACCTGGAAAGC  
 ATAGAGAATTCTCAAAAAGGCTTGGTGGTGTAAAAAATTCATCCTAGAAAAAGTGAAGGAGCACCAGGA  
 GTCCCTGGACCCCGCAACCCCTCGGATTACATCGACTGTTTCCTCAGCAAGATCGAGGAGGAGAAACAC  
 AACCTGAAATCTGATTTAATCTGGAGAATTTGGCCATCTGTGGGTCTAACTTGTTCACGGCAGGCACAG  
 AGACAACCAGCACCACCTGAGATTCGGGCTTCTGCTCCTGTCAAGCATCCAGAGGTGCAAGCCAAAGT  
 TCATGAAGAACTTGATCGTGTGATTGGACGCCACCAACCCCCAGCATGAAGGACAAGATGAAGCTGCC  
 TATACAGATGCCGTGCTGCATGAGATTCAAAGATACATCACTCTCCTTCTAGTCTGCCCATGCTG  
 TGGTCCAGGACACAAAATTCAGACACTATGTCATCCCAAGGGCACCGCTGTGTTCCCGTTTCTGTCTTC  
 CATCTTGTGGATCAAAAAGGAGTTTCCCAACCCAGAGAAGTTTGATCCAGGACACTTTCTGGATAAAAAT  
 GGCTGTTCAAGAAAACAGACTACTTTGTTCTTTCTCCCTCGGTAATATACACGTTTTGGGCAACTCT  
 TAGCGTCACTGAATTACGCTTACGTGACCCACTGAT**GTAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001167905

**Insert Size:** 1371 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001167905.1](#), [NP\\_001161377.1](#)

RefSeq Size: 1596 bp

RefSeq ORF: 1371 bp

Locus ID: 226143

UniProt ID: [A0A1D5RLI1](#)

Cytogenetics: 19 C3

**Gene Summary:** A cytochrome P450 monooxygenase involved in polyunsaturated fatty acids (PUFAs) metabolism and signaling (PubMed:15084647). Catalyzes preferentially the epoxidation of double bonds of PUFAs (PubMed:15084647). Converts arachidonic acid primarily to stereospecific products (8R,9S)-epoxyeicosatrienoate (EET) and (11R,12S)-EET (PubMed:15084647). Via EETs may inhibit the epithelial sodium channels in nephron segments, leading to increased sodium excretion and stable systemic blood pressure (PubMed:24966089, PubMed:24368771). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) (PubMed:15084647).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 3' UTR and coding sequence compared to variant 1. The resulting isoform (2) has a shorter and distinct C-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.