

## Product datasheet for MR218956

### Cyb5r2 (NM\_177216) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyb5r2 (NM_177216) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyb5r2
Synonyms:	b5R.2; D630003K02Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR218956 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAGTGTCAAGAAGAAAGATCTTATCACCTTACAGGACCCTGAAGCCAAGTACCCGCTGCCCTTGATTG  
AGAAGGAGCAAATCAGTCACAACACCAGAAGGTTCCGCTTTGGGCTGCCCTCACCAGACCATGTCCTGGG  
GCTTCTGTCCGTAAGTATGTCCATCTCTGGCACAAATTAACAATGAATTGGTGATCAGGGCTTACACA  
CCTGTCTCCAGTGACGATGATCAAGGCTTGTGGACTTAATTATAAAGATCTACTTCAAAAATGTGCACC  
CCAAGTATCCTGAAGGAGAAAGATGACTCAGTACTTGGAGAACATGAAAATTGGGGATACCATCCTTTT  
TCGGGGGCCAACAGGGCGCCTGTTCTACAATGAGCCAGGAACATTTTAAATCAAAGCAAACAAAACAAGT  
GAGCCTGAAAAAAGCTGGTTCACCACCTGGGGATGATTGCTGGAGGCACAGGCATTACGCCATGCTAC  
AGCTGATTCGCCACATCACCAAGGACACCAGCGATGAGACCAGGATGTCCTCCTCTTTGCTAACAGAC  
AGAAGAGGATATCTTGCTGAGAAAGGAGCTAGAAGAAGTCGCCACGACTCATCAAAACAGTTCAACCTG  
TGGTATACCCTGGACAGGCCTCCAGTGACTGGAAGTACAGCTCAGGCTTTGTTAGCGCTGACATGATCA  
AGGAGCACCTCCCTCCTCCTGGGAGGACACGCTCATCCTGGTGTGTGGCCACCACCTGTATCCAGGC  
TGCCGCTACCCAGCCTGGAGCAGCTCGGCTATACCAAGGACATGATTTTTACCTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR218956 protein sequence  
Red=Cloning site Green=Tags(s)

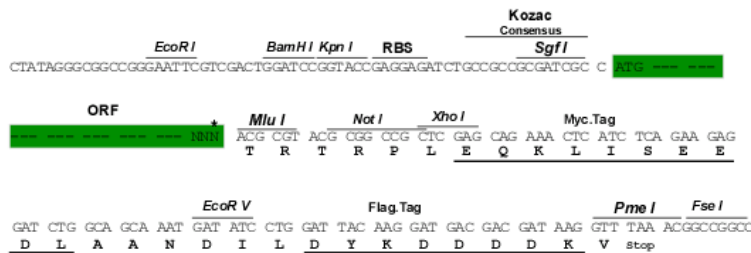
MSVKKKDLITLQDPEAKYPLPLIEKEQISHNTRFRFGLPSPDHVGLPVGNYVHLLAQINNELVIRAYT  
 PVSSDDDDQGFVDLIIKIYFKNVHPKYPEGGKMTQYLENMKIGDTILFRGPTGRLFYNEPGTILIKANKTS  
 EPEKLVHHLGMIAGGTGITPMLQLIRHITKDTSDETRMSLLFANQTEEDILLRKELEEVATTHHKQFNL  
 WYTLDRPPSDWKYSSGFVSADMIKEHLPPPGEDTLILVCGPPPLIQAAAHPLEQLGYTKDMIFTY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_177216

**ORF Size:** 831 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\\_177216.1](#), [NM\\_177216.2](#), [NM\\_177216.3](#), [NM\\_177216.4](#), [NP\\_796190.1](#)

**RefSeq Size:** 2724 bp

**RefSeq ORF:** 831 bp

**Locus ID:** 320635

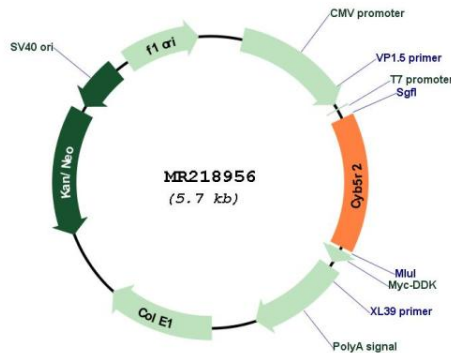
**UniProt ID:** [Q3KKNK3](#)

**Cytogenetics:** 7 E3

**MW:** 31.3 kDa

**Gene Summary:** NADH-cytochrome b5 reductases are involved in desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism, and, in erythrocyte, methemoglobin reduction. Responsible for NADH-dependent lucigenin chemiluminescence in spermatozoa by reducing both lucigenin and 2-[4-iodophenyl]-3-[4-nitrophenyl]-5-[2,4-disulfophenyl]-2H tetrazolium monosodium salt (WST-1) (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR218956