

## Product datasheet for **RR215562**

### Cyb5r2 (NM\_001014244) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cyb5r2 (NM\_001014244) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cyb5r2  
**Synonyms:** RGD1308421  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR215562 representing NM\_001014244  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAGCGTCAAGAAGAAAGATCTTATCACTTTACAGGACCCTGAAGCCAAGTACCCGCTGCCCTTGATTG  
AGAAAGAGCAAATCAACCACAACACCAGAAGGTTCCGATTTGGACTGCCCTCACCAGACCATGTCCTAGG  
GCTTCTGTAGGTAAGTACTATGTCCATCTCTTGGCACAATAACAATGAATTGGTGATCAGGGCTTACACG  
CCTGTCTCCAGTGACGATGATCAAGGATTTGTGGACTTAATTATAAAGATCTACTTCAAAAATGTGACC  
CTAAGTATCCTGAAGGAGAAAGATGACTCAGTACTTGGAGAATATGAAAATTGGGGACACCATTCTTTT  
TCGGGGGCCAACGGGGCGCTGTCTATAATGAGCCAGGGACCCTTTAATCAAAACAGACAAAACGAGT  
GAGCCTGAAAAAAGCTGGTTTACACCTGGGGATGATTGCTGGAGGCACAGGCATTACGCCCATGCTAC  
AGCTAATTCGCCACATCACCAAGGACACCAGCGATGGGACCAGGATGTCCTCCTCTTTGCCAACAGAC  
AGAAGAGGATATCTTGCTGAGAAAGGAGCTAGAAGAAGTGCCACAACGCATCAGAACCAGTTGAGCCTG  
TGGTATACCCTGGACAGGCCCCCAAGTGGTTGGGAGTACAGCTCAGGCTCATTACTGCAGACATGATCA  
AGGAGCACCTCCCTCCTCTGGGAGGCCACACTCATCCTGGTATGTGGCCACCACCTGTATCCAGGA  
GGCAGCTACCCAGCCTGGAGCAGCTTGGCTACACCAAGGACATGATTTTTACCTAC

**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA**



[View online »](#)

**Protein Sequence:** >RR215562 representing NM\_001014244  
Red=Cloning site Green=Tags(s)

MSVKKKDLITLQDPEAKYPLPLIEKEQINHNTRFRFGLPSPDHVGLPVGNYVHLLAQINNELVIRAYT  
 PVSSDDQGFVDLIIKIYFKNVHPKYPEGGKMTQYLENMKIGDTILFRGPTGRLFYNPGTLLIKTDKTS  
 EPEKLVHHLGMIAGGTGITPMLQLIRHITKDTSDGTRMSLLFANQTEEDILLRKELEEVATTHQNQFSL  
 WYTLDRPPSGWEYSSGFIADMIKEHLPPPGEATLILVCGPPPLIQEAHPSLEQLGYTKDMIFTY

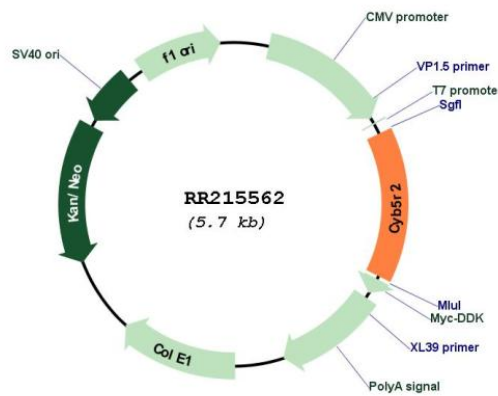
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001014244  
**ORF Size:** 828 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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>	<a href="#">NM_001014244.1</a> , <a href="#">NP_001014266.1</a>
<b>RefSeq Size:</b>	1349 bp
<b>RefSeq ORF:</b>	831 bp
<b>Locus ID:</b>	365345
<b>UniProt ID:</b>	<a href="#">Q6AY12</a>
<b>Cytogenetics:</b>	1q33
<b>MW:</b>	31.2 kDa
<b>Gene Summary:</b>	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]