

Product datasheet for **MR222277**

Cyp26b1 (NM_175475) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyp26b1 (NM_175475) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyp26b1
Synonyms:	CP26; P450RAI-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222277 representing NM_175475
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGTTGAAGGCTTGGAGTTGGTGTGCGGCGTGGCCACCCTCGCCGCGTGCCTGGTGTCCGTGACGC
 TGCTGCTGGCGGTGTGCGAGCAGCTGTGGCAGCTGCGCTGGGCTGCCACCCGCGACAAGAGCTGCAAGCT
 GCCCATCCCCAAGGGCTCCATGGGATCCCGCTCATCGGAGAGACTGGTCACTGGTTGCTACAGGGTTCC
 GGCTTCCAGTCGTGCGCGCCGGAGAAGTATGGCAACGTTTTAAGACACACTTACTGGGCGGCCGCTGA
 TTCGTGTGACCGGTGCGGAGAATGTGCGCAAGATCCTACTGGGCGAACACCAGCTAGTGAGCACCAGTG
 GCCGCGGAGCGCACGCGTACTGCTGGTCCCAACACGGTGGCCAATTCATTGGCGACATCCACCACAAC
 AAGCGCAAGGTCTTCTCCAAGATCTTCAGCCATGAGGCACTTGTAGAGCTACCTGCCCAAGATCCAACCTG
 TGATCCAGGATACACTTCGAGCCTGGAGCAGCCAGCCTGAGGCCATCAATGTATATCAGGAGGCCAGCG
 ACTTACCTCCGAATGGCCGTGCGTGTGCTGCTAGGCTTACGATCCCTGAGGAGGACCTGGCCACCTC
 TTTGAGGTATACAGCAGTTTGTGGAGAATGTCTTCTCTGCCAGTGGACCTGCCCTTCACTGGCTACC
 GGAGGGGCATCCAAGCTCGGCAGATCCTTCAGAAGGGCCTAGAGAAGGCTATCCGTGAGAAGCTGCAGTG
 TACCCAGGGCAAAGACTACTCGGACGCCCTGGACATTCTCATTGAGAGCAGCAAGGAACATGGCAAGGAG
 ATGACCATGCAGGAGCTGAAGGATGGAACCCTGGAGTTGATCTTCGACAGCTACGCCACGACGGCCAGTG
 CAAGCACATCCTTGATCATGCAACTGCTAAAACACCCTGCTGTGCTGGAGAAGCTGAGGGAGGAAGCTGCG
 GGCCAGGGCTGCTGCATGGCGGTGGCTGCCCTGTGAGGGTACCCTGCGCCTGGACACGCTCAGCAGC
 CTGCGCTACCTGGACTGTGTATCAAGGAGGTCATGAGACTTTCACGCCGCTCAGGCGGCTACCGCA
 CATGTGCTGCAGACCTTCGAAGTGGATGGTTTCCAGATCCCCAAGGGCTGGAGTGTATGTATAGCATCCG
 AGACACTCACGACACAGCGCCCGTGTTCAGGACGTGAATGTGTTTGACCCGGACCGCTTCAGTCAGGCA
 CGCAGTGAGGATAAGGATGGCCGCTTCCATTACCTCCCGTTTGGCGGTGGCGTGGCGACCTGCCTGGGCA
 AGCACTTGGCAAAGCTGTTCTGAAGGTGCTGGCAGTGGAGCTGGCCAGCACTAGCCGCTTCAGAGCTGGC
 CACCCGGACCTTCCCTCGCATCACTCTGGTCCCGCTTTCACCCCGTGGATGGCCTCAGTGTCAAGTTC
 TTTGGTCTGGACTCCAACCAAGATGAGATTCTGCCGGAGACAGAGGCCATGTTGAGTGTACGGTG

**CTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACG
 ATAAGGTTTAA**

Protein Sequence:

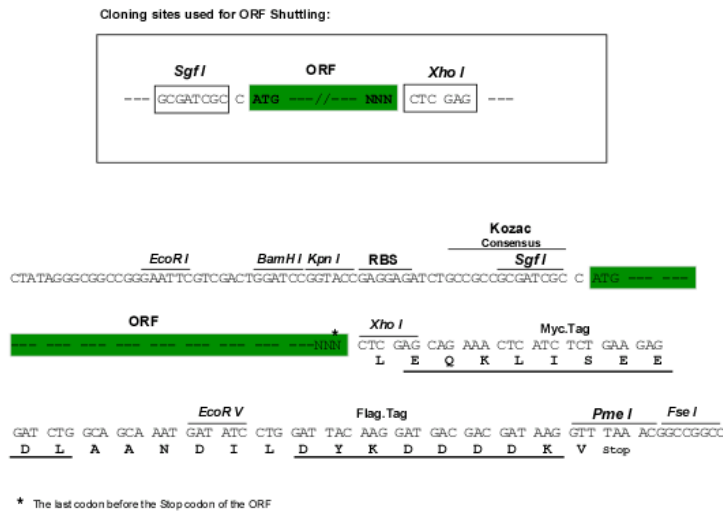
>MR222277 representing NM_175475
 Red=Cloning site Green=Tags(s)

MLFEGLELVSALATLAACLVSVTLLLAVSQQLWQLRWAATRDKSCKLPIPKGSMGFPLIGETGHWLLQGS
 GFQSSRREKYGNVFKTHLLGRPLIRVTGAENVRKILLGEHQLVSTEWPR SARVLLGPNTVANSIGDIHRN
 KRKVF SKIFSHEALESYLPKIQLVIQDTLRAWSSQPEAINVYQEAQRLTFRMAVRVLLGFSIPEEDLGHL
 FEVYQQFVENVFSLPVDLPFSGYRRGIQARQILQKGLEKAIREKLQCTQKDYSDALDILIESSKEHGKE
 MTMQELKDGTLELIFAAYATTASASTSLIMQLLKHPAVLEKLREELRAQGLLHGGCPCEGLRLDLTSS
 LRYLDCVIKEVMRLFTPVSGGYRTVLQTFELDFQIPKGWSVMYSIRDTHDTAPVFKDVNVFDPDRFSQA
 RSEDKDGRFHYPFGGGVRTCLGKHLAKLFLKVLAVELASTSRFELATRTFPRITLVPVLHPVDGLSVKF
 FGLDSNQNEILPETEAMLSATV

LEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-XhoI

Cloning Scheme:


ACCN: NM_175475

ORF Size: 1536 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_175475.3](#), [NP_780684.1](#)

RefSeq Size: 4751 bp

RefSeq ORF: 1539 bp

Locus ID: 232174

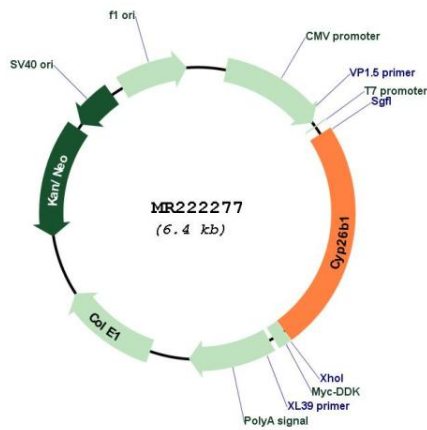
UniProt ID: [Q811W2](#)

Cytogenetics: 6 C3

MW: 57.4 kDa

Gene Summary: Involved in the metabolism of retinoic acid (RA), rendering this classical morphogen inactive through oxidation. Involved in the specific inactivation of all-trans-retinoic acid (all-trans-RA), with a preference for the following substrates: all-trans-RA > 9-cis-RA > 13-cis-RA. Generates several hydroxylated forms of RA, including 4-OH-RA, 4-oxo-RA, and 18-OH-RA. Essential for postnatal survival. Plays a central role in germ cell development: acts by degrading RA in the developing testis, preventing STRA8 expression, thereby leading to delay of meiosis. Required for the maintenance of the undifferentiated state of male germ cells during embryonic development in Sertoli cells, inducing arrest in G0 phase of the cell cycle and preventing meiotic entry. Plays a role in skeletal development, both at the level of patterning and in the ossification of bone and the establishment of some synovial joints.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222277