

## Product datasheet for **MR208021**

### **Cyp8b1 (NM\_010012) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cyp8b1 (NM_010012) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyp8b1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR208021 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)  
 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGACGCTGTGGTGTACAGTGCTAGGAGCCTGCTCACGGTTGTGGGATGCCTGTGTCTGTCTGCTCTGCTGC  
 TCAGGCACCGCAGGCCCTGGGAGCCACCTCTGGACAAGGGTTTTGTGCCCTGGCTGGGTCACCTCCATGGC  
 TTTCCGGAAGAATATGTTTTGAATTCCTGAAGGGGATGCGGGCCAAGCACGGGGATGTCTTACGGTGCAG  
 CTGGGAGGCCAGTACTTCACCTTTGTCATGGACCCCTGTCTTTGGCCCATCATTAAGAACACAGAGA  
 AAGCGCTGGACTTCCAGTCTATGCAAAAAGAACTGGTGTCAAGGTGTTGGGTACCAGTCTGTAGATGG  
 GGACCACAGGATGATCCACTTAGCTAGTACCAAGCATCTGATGGGGCAAGGCTTGGAGGAACTCAACCAG  
 GCCATGCTGGACAGCCTATCCTTGGTATGCTAGGGCCTAAAGGTTGAGTCTGGGTGCCAGCTCCTGGT  
 GTGAAGATGGCCTCTTCACTTCTGCTACAGAATCCTGTTAAGGCTGGCTTCTGAGCTTATTCGCTA  
 CACCAAGGACAAGCAGCAAGACCTGGATGAGGCCGATGAGCTGTTAGGAAGTCCGTCGATTTGACTTT  
 CTCTTCCCAGGTTTGTCTACTCCCTACTGGGGCCCCGGGAGTGGGTGGAAGTGAGCCAGTTGCAGCGTC  
 TCTTCCACCAGAGACTCTCTGTGGAGCAAAACCTGGAAAAAGACGGCATAAGCTGTTGGTTAGGCTACAT  
 GCTTCAGTTTCTGAGGGAGCAAGGAATAGCTTCCATCCATGCAGGACAAAATTTAACTTTATGATGCTCTGG  
 GCCTCCCAGGGGAACACGGGACCCACCTGTTTCTGGGTCTCTTATTCTGCTGAAGCACCAGGATGCCA  
 TGAAGGCTGTGCGTGAGGAAGCCACCAGGGTCATGGGTAAAGCCAGGCTGGAAGCCAAGAAGTCGTTTAC  
 TTTCACTCCCAGTGCCCTGAAACACACTCCCGTGTGGACAGCGTGATGGAGGAGAGTCTGCGTCTCTGT  
 GCCACCCACCCTCCTCAGGGTGGTACAGGAGGATTATGCTTGAAGATGGCCAGCGGGCAAGAGTACC  
 AGATCCGTGCGGAGATAAAGTGGCTCTTCCCCTATCTCTCAGTACACATGGACCCCGACATCCACCC  
 TGAGCCACAGCCTTCAAGTATGATCGGTTCTCAACCCGGATGGCACCCGAAAGTGGACTTCTACAAG  
 TCGGGCAAGAAGATCCACCACTACAGCATGCCTTGGGGCTCGGGTGTTCCTCAAGTGCCCCGGCAGGTTCT  
 TTGCCCTCAGCGAGATGAAGACCTTTGCTTCTTATGATTATGACTTCGACTTCAAGCTGGTCGACCC  
 CGACATACCTGTGCCCCATTGACCCAAGGCGCTGGGGCTTGGCACCTCACAGCTAGCCATGAGGTA  
 CGTTCTCTATCGCCTGAAGCCGTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208021 protein sequence  
 Red=Cloning site Green=Tags(s)  
 MTLWCTVLGALLTVVGCLCLLLLLRHRRPWEPPLDKGFVFWLGHSMFRKNMFEFLKGMRAKHGDVFTVQ  
 LGGQYFTFVMDPLSFGPIIKNTEKALDFQSYAKELVLKVFQYQSVVDGHRMIHLASTKHLMGQGLEELNQ  
 AMLDSLVLMLGPKGSSLGASSWCEDGLFHFCYRILFKAGFLSLFGYTKDKQQDLDEADELFRKFRFDF  
 LFPRFVYSLLGPREWVEVSQQLRQLFHQRLSVEQNLEKDGISWLYGMLQFLREQIASSMQDKFNFMMLW  
 ASQNGTGPTCFWVLLFLLKHQDAMKAVREEATRVMGKARLEAKKSFTFTPSALKHTPVLDVSMEESSLRC  
 ATPTLLRVVQEDYVYVLMKASGQEYQIRRGDKVALFPYL SVHMDDPDHPEPTAFKYDRFLNPDGTRKVDYK  
 SGKKIHHYSMPWGSVSKCPGRFFALSEMKTFLVLLMIMYDFKL VDPDIPVPPIDPRRWGFGTSQPSHEV  
 RFLYRLKPVQ

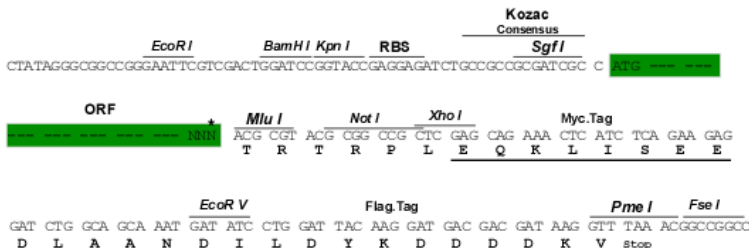
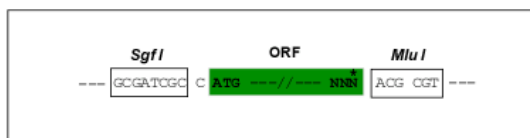
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_010012

ORF Size: 1503 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\\_010012.2](#), [NP\\_034142.2](#)

RefSeq Size: 1950 bp

RefSeq ORF: 1503 bp

Locus ID: 13124

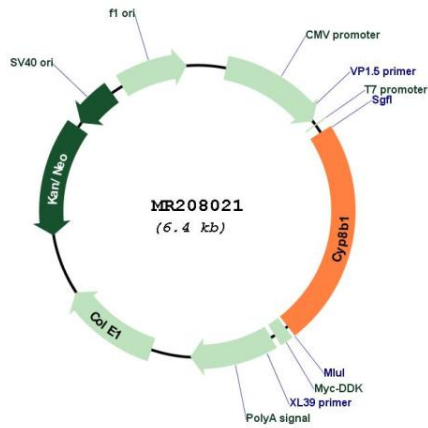
UniProt ID: [O88962](#)

Cytogenetics: 9 F4

**MW:** 57.7 kDa

**Gene Summary:** Involved in bile acid synthesis and is responsible for the conversion of 7 alpha-hydroxy-4-cholesten-3-one into 7 alpha, 12 alpha-dihydroxy-4-cholesten-3-one. Responsible for the balance between formation of cholic acid and chenodeoxycholic acid. Has a rather broad substrate specificity including a number of 7-alpha-hydroxylated C27 steroids. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208021