

## Product datasheet for **MC223331**

### **Klb (NM\_031180) Mouse Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Klb (NM_031180) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Klb
Synonyms:	AV071179; betaKlotho
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223331 representing NM_031180 <b>Red</b> =Cloning site <b>Blue</b> =ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGACAGGCTGTGCAGCAGGGTCTCCGGGAATGAATGGATTTTCTCAGCTCTGATGAAAGAAACA  
CACGCTCTAGGAAAACAATGTCCAACAGGGCACTGCAAAGATCTGCCGTGCTGTCTGCGTTTGTCTGCT  
GCGAGCTGTACC GGCTTCTCCGGAGACGGGAAAGCAATATGGGATAAAAAACAGTACGTGAGTCCGGTA  
AACCCAAGTCAGCTGTTCTCTATGACACTTTCCCTAAAACTTTTCTGGGGCGTTGGGACCGGAGCAT  
TTCAAGTGAAGGGAGTTGGAAGACAGATGGAAGAGGACCCTCGATCTGGGATCGGTACGTCTACTACA  
CCTGAGAGGTGTCAACGGCACAGACAGATCCACTGACAGTTACATCTTTCTGGAAAAAGACTTGTGGCT  
CTGGATTTTTTAGGAGTTTTTTTTATCAGTTCTCAATCTCCTGGCCACGGTTGTTTCCCAATGGAACAG  
TAGCAGCAGTGAATGCGCAAGGTCTCCGGTACTACCGTGCACTTCTGGACTCGTGGTACTTAGGAATAT  
CGAGCCCATTGTTACCTTGTACCATTGGGATTTGCCTCTGACGCTCCAGGAAGAAATATGGGGCTGGAAA  
AATGCAACTATGATAGATCTCTCAACGACTATGCCACATACTGCTTCCAGACCTTTGGAGACCGTGTCA  
AATATTGGATTACAATTCACAACCCTTACCTTGTGCTTGGCATGGGTTTGGCACAGGTATGCATGCACC  
AGGAGAGAAGGGAAATTTAACAGCTGTCTACACTGTGGACACAACCTGATCAAGGCACATTCGAAAAGTG  
TGGCATAACTACGACAAAACTCCGCCCTCATCAGAAGGGTTGGCTCTCCATCACCTTGGGGTCCCATT  
GGATAGAGCCAAACAGAACAGACAACATGGAGGACGTGATCAACTGCCAGCACTCCATGTCTCTGTGCT  
TGGATGGTTTCGCAACCCCATCCACGGGACGGCGACTACCCTGAGTTTATGAAGACGGGCGCCATGATC  
CCCAGTTCTCTGAGGCAGAGAAGGAGGAGGTGAGGGGCACGGCTGATTTCTTTGCCTTTTCTTCCGGGC  
CCAACAACCTCAGGCCCTCAAACACCGTGGTAAAAATGGGACAAAATGTATCACTCAACTAAGGCAGGT  
GCTGAACCTGGATTAACCTGGAATACGATGACCCTCAAATCTTGATTTCCGAGAACGGCTGGTTCACAGAT  
AGCTATAAAAGACAGAGGACACCACGGCCATCTACATGATGAAGAATTTCTAAACCAGGTTCTTCAAG  
CAATAAAATTTGATGAAATCCGCGTGTGGTTATACGGCCTGGACTCTCCTGGATGGCTTTGAGTGGCA  
GGATGCCTATACGACCCGACGAGGGCTGTTTTATGTGGACTTTAACAGTGAGCAGAAAGAGAGGAAACCC



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AAGTCCTCGGCTCATTACTACAAGCAGATCATACAAGACAACGGCTTCCCTTTGAAAGAGTCCACGCCAG
ACATGAAGGGTCGGTTCCTGTGATTTCTTTGGGGAGTCACTGAGTCTGTTCTTAAGCCCGAGTTTAC
GGTCTCTCCCGCAGTTTACCGATCCTCACCTGTATGTGTGGAATGTCCTGGCAACAGATTGCTCTAC
CGAGTGAAGGGGTAAGGCTGAAAAACAAGACCATCCAGTGCACAGATTATGTGAGCATCAAAAAACGAG
TTGAAATGTTGGCAAAAATGAAAGTCACCCACTACCAGTTTGTCTGGACTGGACCTCTATCCTTCCCAC
TGGCAATCTGTCCAAAGTTAACAGACAAGTGTTAAGTACTATAGGTGTGTGGTGAAGGACTGAAG
CTGGGCGTCTTCCCATGGTGACGTTGTACCACCAACCCACTCCCATCTCGGCCCTCCCCTGCCACTTC
TGAGCAGTGGGGGTGGCTAAACATGAACACAGCCAAGGCTTCCAGGACTACGCTGAGCTGTGCTCCG
GGAGTTGGGGACTTGGTGAAGCTCTGGATCACCATCAATGAGCCTAACAGGCTGAGTGACATGTACAAC
CGCAGCAGTAATGACACCTACCGTGCAGCCACAACCTGATGATCGCCATGCCAGGTCTGGCACCTCT
ATGATAGGCAGTATAGGCCGGTCCAGCATGGGGCTGTGTCGCTGTCTTACATTGCGACTGGCAGAACC
TGCCAACCCCTTTGTGGATTCACTGGAAGGCAGCCGAGCGCTTCTCCAGTTTGAAGTGCCTGGTTT
GCAGATCCGCTCTCAAGACTGGCGACTATCCATCGGTTATGAAGGAATACATCGCCTCCAAGAACCAGC
GAGGGCTGTCTAGCTCAGTCTGCCGCGTTCACCGCAAGGAGAGCAGGCTGGTGAAGGGTACCGTCGA
CTTCTACGCACTGAACCACTTCACTACGAGTTCTGTGATACACAAGCAGCTGAACACCAACCGCTCAGTT
GCAGACAGGGACGTCCAGTTCTGCAGGACATCACCCGCTAAGCTCGCCAGCCGCTGGCTGTAAACAC
CCTGGGGAGTGGCAAGCTCCTTGCCTGGATCCGGAGGAACTACAGAGACAGGGATATCTACATCACAGC
CAATGGCATCGATGACCTGGCTCTAGAGGATGATCAGATCCGAAAGTACTACTTGGAGAAGTATGTCAG
GAGGCTCTGAAAGCATATCTCATTGACAAGGTCAAATCAAAGGCTACTATGCATTCAAAGTACTGAAAG
AGAAATCTAAGCCTAGATTTGGATTTTTTCACTCTGACTTCAGAGCTAAGTCTCTGTCCAGTTTACAG
CAAGCTGATCAGCAGCAGTGGCCTCCCGCTGAGAACAGAAGTCTGCGTGTGGTCAAGCTGCGGAAGAC
ACAGACTGCACCATTTGCTCATTCTCGTGGAGAAGAAACCACTCATCTTCTCGGTTGTGCTTCATCT
CCACTCTGGCTGTACTGCTATCCATCACGTTTTTCATCATCAAAGAGAAGAAAATCCAGAAAGCAAG
GAACCTACAAAATATACCATTGAAGAAAGGCCACAGCAGAGTTTTTCAGCTAA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

**Restriction Sites:**

SgfI-MluI

**ACCN:**

NM\_031180

**Insert Size:**

3132 bp

**OTI Disclaimer:**

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_031180.2](#), [NP\\_112457.1](#)

**RefSeq Size:** 3439 bp

**RefSeq ORF:** 3132 bp

**Locus ID:** 83379

**UniProt ID:** [Q99N32](#)

**Cytogenetics:** 5 C3.1

**Gene Summary:** Contributes to the transcriptional repression of cholesterol 7-alpha-hydroxylase (CYP7A1), the rate-limiting enzyme in bile acid synthesis. Probably inactive as a glycosidase. Increases the ability of FGFR1 and FGFR4 to bind FGF21.[UniProtKB/Swiss-Prot Function]