

## Product datasheet for RC211186

### KLB (NM\_175737) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KLB (NM_175737) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KLB
Synonyms:	BKL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211186 representing NM_175737 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGCCAGGCTGTGCGGCAGGATCTCCAGGGAATGAATGGATTTTCTCAGCACTGATGAAATAACCA  
CACGCTATAGGAATACAATGTCCAACGGGGATTGCAAAGATCTGTCATCCTGTCAGCACTTATTCTGCT  
ACGAGCTGTTACTGGATTCTCTGGAGATGGAAGAGCTATATGGTCTAAAAATCCTAATTTTACTCCGGTA  
AATGAAAGTCAGCTGTTTCTCTATGACACTTCCCTAAAACTTTTTCTGGGGTATTGGGACTGGAGCAT  
TGCAAGTGAAGGGAGTTGGAAGAAGGATGAAAAAGGACCTTCTATATGGGATCATTTCCACACACACA  
CCTTAAAAATGTCAGCAGCACGAATGGTCCAGTGACAGTTATATTTTTCTGAAAAAGACTTATCAGCC  
CTGGATTTTATAGGAGTTTCTTTTTATCAATTTCAATTTCTGGCCAAGGCTTTTCCCCGATGGAATAG  
TAACAGTTGCCAACGCAAAAGGTCTGCAGTACTACAGTACTCTTCTGGACGCTCTAGTGCTTAGAAACAT  
TGAACCTATAGTTACTTTATACCACTGGGATTTGCCTTTGGCACTACAAGAAAAATATGGGGGTGGAAA  
AATGATACCATAATAGATATCTCAATGACTATGCCACATACTGTTTCCAGATGTTTGGGACCGTGTCA  
AATATTGGATTACAATTCACAACCCATATCTAGTGGCTTGGCATGGGTATGGGACAGGTATGCATGCCCC  
TGGAGAGAAGGGAAATTTAGCAGCTGTCTACACTGTGGACACAACCTTGATCAAGGCTCACTCGAAAAGTT  
TGGCATAACTACAACACACATTTCCGCCACATCAGAAGGGTTGGTTATCGATCAGCTTGGGATCTCATT  
GGATCGAGCCAAACCGGTCGAAAAACAGATGGATATATTTCAAATGTCAACAATCCATGGTTTCTGTGCT  
TGGATGGTTTGCACCCATCCATGGGATGGCGACTATCCAGAGGGGATGAGAAAAGTGTGTTCTCC  
GTTCTACCCATTTTCTCTGAAGCAGAGAAGCATGAGATGAGAGGCACAGCTGATTTCTTTCCTTTTCTT  
TTGGACCAACAACCTCAAGCCCCTAACACCATGGCTAAAAATGGGACAAAAATGTTTCACTTAATTTAAG  
AGAAGCGCTGAAGTAACTGGAATAACAACCCCTCGAATCTTGATTGCTGAGAATGGCTGGTTC  
ACAGACAGTCGTGAAAAACAGAAGACACCACGGCCATCTACATGATGAAGAATTTCTCAGCCAGGTGC  
TTCAAGCAATAAGGTTAGATGAAATACGAGTGTGGTTACTGCCTGGTCTCTCTGGATGGCTTTGA  
ATGGCAGGATGCTTACCCATCCGCCGAGGATTATTTTATGTGGATTTAACAGTAAACAGAAAGACGG



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AAACCTAAGTCTTCAGCACACTACTACAAACAGATCATACGAGAAAATGGTTTTCTTTAAAAGAGTCCA  
 CGCCAGATGTGCAGGGCCAGTTTCCCTGTGACTTCTCTGGGGTGTCACTGAATCTGTTCTTAAGCCCGA  
 GTCTGTGGCTTCGTCCCCACAGTTCAGCGATCCTCATCTGTACGTGTGGAACGCCACTGGCAACAGACTG  
 TTGCACCGAGTGGAAAGGGGTGAGGCTGAAAACACGACCCGCTCAATGCACAGATTTTGTAAACATCAAAA  
 AACAACTTGAGATGTTGGCAAGAATGAAAGTCAACCCTACCGGTTTGTCTGGATTGGGCTCGGTCT  
 TCCCAGTGGCAACCTGTCCGCGGTGAACCGACAGGCCCTGAGGTACTACAGGTGCGTGGTCACTGAGGGG  
 CTGAAGCTTGGCATCTCCGCGATGGTCAACCCTGATTATCCGACCCACGCCACCTAGGCCCTCCCGGAGC  
 CTCTGTTGCATGCCGACGGGTGGCTGAACCCATCGACGGCCGAGGCCCTCCAGGCCACGCTGGGCTGTG  
 CTTCCAGGAGCTGGGGGACCTGGTGAAGCTCTGGATCACCATCAACGAGCCTAACCGGCTAAGTGACATC  
 TACAACCGCTCTGGCAACGACACCTACGGGGCGGCGCACAACCTGCTGGTGGCCACGCCCTGGCCTGGC  
 GCCTCTACGACCGGACAGTTCAGGCCCTCACAGCGCGGGGCGGTGTGCTGTGCTGCACGCGGACTGGGC  
 GGAACCCGCCAACCCCTATGCTGACTCGCACTGGAGGGCGGCGGAGCGCTTCTGCAGTTCGAGATCGCC  
 TGGTTCGCCGAGCCGCTTCAAGACCGGGGACTACCCCGGCCATGAGGAATACATTGCCTCCAAGC  
 ACCGACGGGGGCTTCCAGCTCGGCCCTGCCGCGCTCACGAGGCCGAAAGGAGGCTGCTCAAGGGCAC  
 GGTGACTTCTGCGCGCTCAACCACTTCAACTAGGTTCTGATGCACGAGCAGCTGGCCGGCAGCCGC  
 TACGACTCGGACAGGGACATCCAGTTTCTGCAGGACATCACCCGCTGAGCTCCCCACGCGCTGGCTG  
 TGATCCCTGGGGGTGCGCAAGCTGCTGCGGTGGTCCGGAGGAACTACGGCGACATGGACATTTACAT  
 CACCGCCAGTGGCATCGACGACCAGGCTCTGGAGGATGACCGGCTCCGGAAGTACTACCTAGGGAAGTAC  
 CTTCAGGAGGTGCTGAAAGCATACTGATTGATAAAGTCAGAAATCAAAGGCTATTATGCATTCAAAGTGG  
 CTGAAGAGAAATCAAACCCAGATTTGGATTCTCACATCTGATTTTAAAGTAAATCCTCAATACAATT  
 TTACAACAAAGTGATCAGCAGCAGGGGCTTCCCTTTGAGAACAGTAGTTCTAGATGCAGTCAGACCCAA  
 GAAAATACAGAGTGCAGTGTCTGCTTATCCTTGTGCAGAAGAACTGATATTCTGGGTTGTTGCT  
 TCTTCTCACCCCTGGTTCTACTTATCAATTGCCATTTTCAAAGGCAGAAGAGAAGTAAAGTTTGGAA  
 AGCAAAAAACTTACAACACATACCATTAAGAAAGGCAAGAGAGTTGTTAGC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC211186 representing NM\_175737

Red=Cloning site Green=Tags(s)

MKPGCAAGSPGNEWIFFSTDEITTRYRNTMSNGLQRSVILSALILLRAVTGFSGDGRAIWSKNPNFTPV  
 NESQLFLYDTPKNFFWIGTGALQVEGSWKDKGSPSIWDHFITHLKNVSSTNGSSDSYIFLEKDLA  
 LDFIGVSFYQFSISWPRLFPDGI VTVANAKGLQYYSTLLDALVLRNIEPIVTL YHWDLPLALQEKYGGWK  
 NDTIIDI FNDYATYCFQMF GDRVKYWI THNPYLVAWHGYGTGMHAPGEKGNLAAVYTVGHNL IKAHVKV  
 WHNYNTHFRPHQKGLSITL GSHWIEPNRSENTMDIFK CQQSMVSVL GWFANPIHGDDYPEGMRKCLFS  
 VLP I FSEAEKHMERGTADFFAFSFGPNFKPLNTMAKMGQNVSLNLRALNWIKLEYNNPRILIAENGWF  
 TDSRVKTEDTTAIYMMKNFLSQVLQAIRLDEIRVFGYTAWSLLDGFEWQDAYTIRRGLFYVDFNSKQKER  
 KPKSSAHYYKQI IRENGFSLKESTPDVQGFPCDFSWGVTESVLKPESVASSPQFSDPHLYVWNATGNRL  
 LHRVEGVRKTRPAQCTDFVNIKKQLEMLARMKVTHYRFALDWASVLP TGNLSAVNRQALRYRCVSE  
 LKLGISAMVTL YYP THAHLGLPEPLLHADGWLNPSTAEAFQAYAGLCFQELGDLVKLWITINEPNRLSDI  
 YNRSGNDTYGAAHNLVVAHALAWRLYDRQFRPSQRGAVSLSLHADWAEPANPYADSHWRAAERFLQFEIA  
 WFAEPLFKTDYPAAMREYIASKHRRGLSSSALPRLTEAERRLLKGTVDVFCALNHFTTRFVMHEQLAGSR  
 YDSDRDIQFLQDITRLSSPTRLAVIPWGVKLLRWVRRNYGDMDIYITASGIDDQALEDDRLRKYLGKY  
 LQEV LKAYLIDKVRIGYYAFKLAEEKSKPRFGFFTSDFKAKSSIQFYNKVISSRGFPFENSSRCSQTQ  
 ENTECTVCLFLVQKKPLIFLGCCFFSTLVLLLSIAIFQRQKRRKFWKAKNLQHIPLKKGKRVVS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_175737

**ORF Size:** 3132 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\\_175737.4](#)

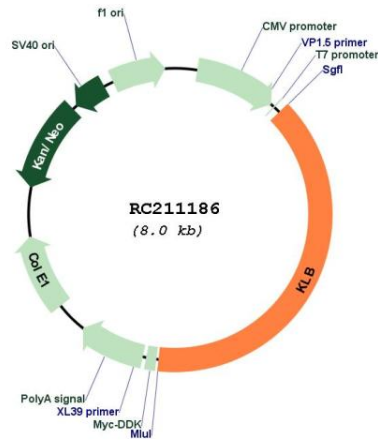
**RefSeq Size:** 3279 bp

**RefSeq ORF:** 3135 bp

**Locus ID:** 152831

UniProt ID: [Q86Z14](#)  
 Cytogenetics: 4p14  
 Protein Families: Transmembrane  
 MW: 119.6 kDa  
 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 (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC211186