

## Product datasheet for SC307023

### KLB (NM\_175737) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KLB (NM_175737) Human Untagged Clone
Tag:	Tag Free
Symbol:	KLB
Synonyms:	BKL
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_175737 edited  
 TCCTCAGTCTCCCAGTTCAGCTAATCATTGACAGAGCTTTACAATCACAAGCTTTTACT  
 GAAGCTTTGATAAGACAGTCCAGCAGTTGGTGGCAAATGAAGCCAGGCTGTGCGGCAGGA  
 TCTCCAGGGAATGAATGGATTTTCTTCAGCACTGATGAAATAACACACGCTATAGGAAT  
 ACAATGTCCAACGGGGATTGCAAAGATCTGTCATCCTGTCAGCACTTATTCTGCTACGA  
 GCTGTTACTGGATTCTCTGGAGATGGAAGAGCTATATGGTCTAAAAATCCTAATTTTACT  
 CCGGTAATGAAAGTCAGCTGTTTCTCTATGACACTTTCCCTAAAAACTTTTTCTGGGGT  
 ATTGGGACTGGAGCATTGCAAGTGAAGGGAGTTGGAAGAAGGATGAAAAAGGACCTTCT  
 ATATGGGATCATTTCCACACACACCTTAAAAATGTCAGCAGCAGGAATGGTCCAGT  
 GACAGTTATATTTTCTGAAAAAGACTTATCAGCCCTGGATTTTATAGGAGTTTCTTTT  
 TATCAATTTTCAATTTCTGGCCAAGGCTTTTCCCGATGGAATAGTAACAGTTGCCAAC  
 GCAAAAGTCTGCAGTACTACAGTACTTCTGGACGCTCTAGTGCTTAGAACATTGAA  
 CCTATAGTTACTTTATACCACTGGGATTTGCCTTTGGCACTACAAGAAAAATATGGGGGG  
 TGGAAAAATGATACCATAATAGATATCTTCAATGACTATGCCACATACTGTTTCCAGATG  
 TTTGGGACCGTGTCAAATATTGGATTACAATTCACAACCCATATCTAGTGGCTTGGCAT  
 GGGTATGGGACAGGTATGCATGCCCTGGAGAGAAGGGAAATTTAGCAGCTGTCTACACT  
 GTGGGACACAACCTTGATCAAGGCTCACTCGAAAGTTTGGCATAACTACAACACATTTT  
 CGCCACATCAGAAGGGTTGGTTATCGATCACGTTGGGATCTCATTGGATCGAGCCAAAC  
 CGGTCGGAAAAACACGATGGATATATTCAATGTCAACAATCCATGGTTTCTGTGCTTGG  
 TGGTTTGCCAACCTATCCATGGGGATGGCGACTATCCAGAGGGGATGAGAAAGAAGTTG  
 TTCTCCGTTTACCCATTTTCTCTGAAGCAGAGAAGCATGAGATGAGAGGCACAGCTGAT  
 TTCTTTGCCTTTTCTTTGGACCAACAACCTTCAAGCCCCTAACACCATGGCTAAAAATG  
 GGACAAAATGTTTCACTTAATTTAAGAGAAGCGCTGAACTGGATTAACCTGGAATACAAC  
 AACCTCGAATCTTGATTGCTGAGAATGGCTGGTTCACAGACAGTCGTGTGAAAACAGAA  
 GACACCACGGCCATCTACATGATGAAGAATTTCTCAGCCAGGTGCTTCAAGCAATAAGG  
 TTAGATGAAATACGAGTGTGGTTATACTGCCTGGTCTCTCCTGGATGGCTTTGATGG  
 CAGGATGCTTACACCATCCGCCGAGGATATTTTATGTGGATTTAACAGTAAACAGAAA



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GAGCGGAAACCTAAGTCTTCAGCACACTACTACAAACAGATCATACGAGAAAATGGTTTT  
 TCTTTAAAGAGTCCACGCCAGATGTGCAGGGCCAGTTTCCCTGTGACTTCTCCTGGGGT  
 GTCAGTGAATCTGTTCTTAAGCCCGAGTCTGTGGCTTCGTCCCCACAGTTCAGCGATCCT  
 CATCTGTACGTGTGGAACGCCACTGGCAACAGACTGTTGCACCGAGTGAAGGGGTGAGG  
 CTGAAAACACGACCCGCTCAATGCACAGATTTTGTAAACATCAAAAAACAACCTTGAGATG  
 TTGGCAAGAATGAAAGTCACCCACTACCGGTTTGTCTGGATTGGGCCTCGGTCTTCCC  
 ACTGGCAACCTGTCCGCGGTGAACCGACAGGCCCTGAGGTACTACAGTGGTGGTTCAGT  
 GAGGGGCTGAAGCTTGGCATCTCCGCGATGGTCAACCCTGTATTATCCGACCCACGCCAC  
 CTAGGCCCTCCCCGAGCCTCTGTTGCATGCCGACGGGTGGCTGAACCCATCGACGCCGAG  
 GCCTTCCAGCCCTACGCTGGGCTGTGCTTCCAGGAGCTGGGGGACCTGGTGAAGCTCTGG  
 ATCACCATCAACGAGCCTAACCGGCTAAGTGACATCTACAACCGCTCTGGCAACGACACC  
 TACGGGGCGGCGACAACCTGCTGGTGGCCACGCCCTGGCTGGCGCTCTACGACCGG  
 CAGTTCAGGCCCTCACAGCGGGGCGGTGTGCTGTGCTGCACGCGGACTGGGCGGAA  
 CCCGCCAACCCCTATGCTGACTCGCACTGGAGGGCGGCCGAGCGCTTCTGCAGTTGAG  
 ATCGCCTGGTTCGCCGAGCGCTTTCAAGACCGGGGACTACCCGCGGCCATGAGGGAA  
 TACATTGCCTCCAAGCACCGACGGGGGCTTCCAGCTCGGCCCTGCCGCGCTCACCCGAG  
 GCCGAAAGGAGGCTGCTCAAGGGCACGGTTCGACTTCTGCGCGCTCAACCACTTACCACCT  
 AGGTTCTGTGATGCACGAGCAGCTGGCCGGCAGCCGCTACGACTCGGACAGGGACATCCAG  
 TTTCTGCAGGACATACCCCGCTGAGCTCCCCACGCGCTGGCTGTGATTCCCTGGGGG  
 GTGCGCAAGCTGCTGCGGTGGTCCGGAGGAACACGGCGACATGGACATTTACATCACC  
 GCCAGTGGCATCGACGACCAGGCTCTGGAGGATGACCGGCTCCGGAAGTACCACCTAGGG  
 AAGTACCTTCAGGAGGTGCTGAAAGCATACCTGATTGATAAAGTCAGAATCAAAGGCTAT  
 TATGCATTCAAACTGGCTGAAGAGAAATCAAACCCAGATTTGGATTCTCACATCTGAT  
 TTTAAAGCTAAATCCTCAATACAATTTTACAACAAAGTATCAGCAGCAGGGGCTTCCCT  
 TTTGAGAACAGTAGTTCTAGATGCAGTCAGACCCAAGAAAATACAGAGTGCAGTGTCTGC  
 TTATTCCTTGTGCAAGAAACCCTGATATTCCTGGGTGTTGCTTCTTCTCCACCCTG  
 GTTCTACTCTTATCAATTGCCATTTTTCAAAGGCAGAAGAGAAGAAAGTTTTGAAAGCA  
 AAAAATTCACAACACATACCATTAAAGAAAGGCAAGAGAGTTGTTAGCTAAACTGATCTG  
 TCTGCATGATAGACAGTTTAAAAATTCATCCAGTTCATATGCTGGTAACTTACAGGAG  
 ATATACCTGTATTATAGAAAGACAATCTGAGATACAGCTGAACCAAGGTGATGACAATT  
 GTCTCTGTGTGGTTCAAAGAACATTCCTTAGGTGTTGACATCAGTGAACCTCAGTTC  
 TTGGATGTAACATAAAGGCTTCATCCTGACAGTAAGCTATGAGGATTACATGCTACATT  
 GCTTCTTAAAGTTTCATCAACTGTATTCCATCATTCTGCTTTAGCTTTCATCTCTACCAA  
 TAGCTACTTGTGGTACAATAAATATTTTTAAGAAGTAAAAAAAAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:**

>Reverse primer walk for NM\_175737 unedited  
 CTGCCAACATTCGGATGAGCCTTGTCAATTGTGTCCCACGTGTAGAACGCTGCTAAATTT  
 CCCTTCTCTCCGGGCATGCATACCTGTCCCATACCCATGCCAAGCCACTAGATATGGGT  
 TGTGAATTGTAATCCAATATTTGACACGGTCCCCAACATCTGGAAACAGTATGTGGCAT  
 AGTCATTGAAGATATCTATTATGGTATCATTTTTCCACCCCATATTTTTCTTGTAGTG  
 CCAAAGGCAATCCCAGTGGTATAAAGTAACTATAGGTTCAATGTTTCTAAGCACTAGAG  
 CGTCCAGAAGAGTACTGTAGTACTGCAGACCTTTTGCCTGGCAACTGTTACTATTCCAT  
 CGGGGAAAAGCCTTGGCCAGGAAATTGAAAATTGATAAAAAGAACTCCTATAAAATCCA  
 GGGCTGATAAGTCTTTTTCCAGAAAAATATAACTGTCACTGGAACCATTCGTGCTGCTGA  
 CATTTTTAAGGTGTGTGGATGAAATGATCCCATATAGAAGTCTTTTTCCATCCTTCT  
 TCCAATCCCTTCCACTTGAATGCTCCAGTCCCAATACCCAGAAAAAGTTTTTAGGGA  
 AAGTGTATAGAGAAACAGCTGACTTTTCAATTTACCGGAGTAAAATTAGGATTTTTAGACC  
 ATATAGCTCTTCCATCTCCAGAGAAATCCAGTAACAGCTCGTAGCAGAATAAGTGCTGACA  
 GGATGACAGATCTTTTGCATCCCCGTTGGACATTGATTCTATAGCGTGTGGTTATTT  
 CATCAGTGCTGAAGAAAATCATTATTCCCTGNAGATCCTGCCGCACAGCCTGGCTTCAT  
 TTGCCACCAACTGCTG

<b>3' Read Nucleotide Sequence:</b>	>Forward primer walk for NM_175737 unedited ATCTCCCTGGAACAACTCTCTACATGTTCTTTGCTTGTGNAAGCATACCTGATTGATAA AGTCAGAAATCAAAGGCTATTATGCATTCAACTGGCTGAAGAGAAATCTAAACCCAGATT TGGATTCTTACATCTGATTTTAAAGCTAAATCCTCAATACAATTTTACAACAAAGTGAT CAGCAGCAGGGGCTTCCCTTTTGAAGACAGTAGTTCTAGATGCAGTCAGACCCAAGAAAA TACAGAGTGCAGTGTCTGCTTATTCCTTGTGCAGAAGAAACCAGTATTCCTGGGTTG TTGCTTCTTCCACCTGGTTCTACTCTTATCAATTGCCATTTTCAAAGGCAGAAGAG AAGAAAGTTTTGGAAAGCAAAAACTTACAACACATACCATTAAGAAAGGCAAGAGAGT TGTTAGCTAAACTGATCTGTCTGCATGATAGACAGTTTAAAAATTCATCCAGTTCCATA TGCTGGTAACTTACAGGAGATATACCTGTATTATAGAAAGACAATCTGAGATACAGCTGT AACCAAGGTGATGACAATTGTCTCTGCTGTGTGGTTCAAAGAACATTCCTTAGGTGTTG ACATCAGTGAAGTCAAGTCTTGGATGTAACATAAAGGCTTCATCCTGACAGTAAGCTAT GAGGATTACATGCTACATTGCTTCTTAAAGTTTCATCACTGTATTCCATCATTCTGCTT TAGCTTTCATCTCTACCAATAGCTACTTGTGGTACAATAAATTATTTTAAAGAAGTAAAA AAAAAAAAAAAAACTCGACTCTAGATTGCGGCCGCGGTCATAGCTGTTT
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_175737
<b>Insert Size:</b>	3600 bp
<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<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_175737.2</a> , <a href="#">NP_783864.1</a>

RefSeq Size: 3279 bp

RefSeq ORF: 3135 bp

Locus ID: 152831

UniProt ID: [Q86Z14](#)

Cytogenetics: 4p14

Protein Families: Transmembrane

**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]