

Product datasheet for **MG222087**

Klb (NM_031180) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klb (NM_031180) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Klb
Synonyms:	AV071179; betaKlotho
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222087 representing NM_031180 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACAGGCTGTGCAGCAGGGTCTCCGGGAATGAATGGATTTTCTCAGCTCTGATGAAAGAAACA
CACGCTCTAGGAAAACAATGTCCAACAGGGCACTGCAAAGATCTGCCGTGCTGTCTGCGTTTGTCTGCT
GCGAGCTGTTACCGGCTTCTCCGGAGACGGGAAAGCAATATGGGATAAAAAACAGTACGTGAGTCCGGTA
AACCCAAGTCAGCTGTTCTCTATGACACTTTCCCTAAAACTTTTCTGGGGCGTTGGGACCGGAGCAT
TTCAAGTGAAGGGAGTTGGAAGACAGATGGAAGAGGACCCTCGATCTGGGATCGGTACGTCTACTCACA
CCTGAGAGGTGTCAACGGCACAGACAGATCCACTGACAGTTACATCTTTCTGGAAAAGACTTGTGGCT
CTGGATTTTTTAGGAGTTTTTTTTATCAGTTCTCAATCTCCTGGCCACGGTTGTTTCCCAATGGAACAG
TAGCAGCAGTGAATGCGCAAGGTCTCCGGTACTACCGTGCACTTCTGGACTCGTGGTACTTAGGAATAT
CGAGCCCATTGTTACCTTGTACCATTGGGATTTGCCTCTGACGCTCCAGGAAGAAATATGGGGCTGGAAA
AATGCAACTATGATAGATCTCTCAACGACTATGCCACATACTGCTTCCAGACCTTTGGAGACCGTGTCA
AATATTGGATTACAATTCACAACCCTTACCTTGTGCTTGGCATGGGTTTGGCACAGGTATGCATGCACC
AGGAGAGAAGGGAAATTTAACAGCTGTCTACACTGTGGACACAACCTGATCAAGGCACATTCGAAAAGTG
TGGCATAACTACGACAAAACTTCGCCCTCATCAGAAGGGTTGGCTCTCCATCACCTTGGGGTCCCATT
GGATAGAGCCAAACAGAACAGACAACATGGAGGACGTGATCAACTGCCAGCACTCCATGTCTCTGTGCT
TGGATGGTTTCGCAACCCCATCCACGGGACGGCGACTACCCTGAGTTTATGAAGACGGGCGCCATGATC
CCCAGTTCTCTGAGGCAGAGAAGGAGGAGGTGAGGGGCACGGCTGATTTCTTGCCTTTTCTTCCGGGC
CCAACAACCTTCAGGCCCTCAAACACCGTGGTGAATGGGACAAAATGTATCACTCAACTAAGGCAGGT
GCTGAACCTGGATTAACCTGGAATACGATGACCCTCAAATCTTGTATTTCCGAGAACGGCTGGTTCACAGAT
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CAATAAAATTTGATGAAATCCCGTGTGGTTATACGGCCTGGACTCTCCTGGATGGCTTTGAGTGGCA
GGATGCCTATACGACCCGACGAGGGCTGTTTTATGTGGACTTTAACAGTGAGCAGAAAGAGAGGAAACCC



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AAGTCCTCGGCTCATTACTACAAGCAGATCATACAAGACAACGGCTTCCCTTTGAAAGAGTCCACGCCAG
 ACATGAAGGGTCGGTTCCCTGTGATTTCTTTGGGGAGTCACTGAGTCTGTTCTTAAGCCCAGTTTAC
 GGTCTCTCCCGCAGTTTACCGATCCTCACCTGTATGTGTGGAATGTCCTGGCAACAGATTGCTCTAC
 CGAGTGAAGGGGTAAGGCTGAAAAAAGACCATCCAGTGCACAGATTATGTGAGCATCAAAAAACGAG
 TTGAAATGTTGGCAAAAATGAAAGTCACCCACTACCAGTTTGTCTGGACTGGACCTCTATCCTTCCCAC
 TGGCAATCTGTCCAAAGTTAACAGACAAGTGTAAAGTACTATAGGTGTGTGGTGAAGCAAGGACTGAAG
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 TGAGCAGTGGGGGTGGCTAAACATGAACACAGCCAAGGCCTTCCAGGACTACGCTGAGCTGTGCTCCG
 GGAGTTGGGGGACTTGGTGAAGCTCTGGATCACCATCAATGAGCCTAACAGGCTGAGTGACATGTACAAC
 CGCAGCAGTAATGACACCTACCGTGCAGCCACAACCTGATGATCGCCATGCCAGGTCTGGCACCTCT
 ATGATAGGCAGTATAGGCCGGTCCAGCATGGGGCTGTGTCGCTGTCTTACATTGCGACTGGCAGAACC
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 GCAGATCCGCTCTCAAGACTGGCGACTATCCATCGTTATGAAGGAATACATCGCCTCCAAGAACCAGC
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 CTTCTACGCACTGAACCACTTCACTACGAGGTTCTGTGATACACAAGCAGCTGAACACCAACCGCTCAGTT
 GCAGACAGGGACGTCCAGTTCTGCAGGACATCACCCGCCTAAGCTCGCCAGCCGCTGGCTGTAAAC
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 CAATGGCATCGATGACCTGGCTCTAGAGGATGATCAGATCCGAAAGTACTACTTGGAGAAGTATGTCAG
 GAGGCTCTGAAAGCATATCTCATTGACAAGGTCAAATCAAAGGCTACTATGCATTCAAAGTACTGAAAG
 AGAAATCTAAGCCTAGATTTGGATTTTTACCTCTGACTTCAAGAGCTAAGTCTCTGTCCAGTTTACAG
 CAAGCTGATCAGCAGCAGTGGCTCCCGCTGAGAACAGAAGTCTGCGTGTGGTCAAGCTGCGGAAGAC
 ACAGACTGCACCACTTGTCTATTTCTCGTGGAGAAGAAACCACTCATCTTCTCGGTTGTGCTTCACT
 CCCTCTGGCTGTACTGCTATCCATCACCGTTTTTCATCATCAAAAGAGAAGAAAATCCAGAAAGCAAG
 GAACTTACAAAATATACCATTGAAGAAAGGCCACAGCAGAGTTTTTCAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222087 representing NM_031180
 Red=Cloning site Green=Tags(s)

MKTGCAAGSPGNEWIFFSSDERNTRSRKTMNSRALQRSVLSAFVLLRAVTGFSGDGKAIWDKKQYVSPV
 NPSQLFLYDTFPKNFSWGVGTGAFQVEGSWKTDRGPIWDRYVYSHLRGVNGTDRSTDSYIFLEKDLLA
 LDFLGVSYFYQFSISWPRLFPNGTVAAVNAQGLRYYRALLDSLVLRNIEPIVTLYHWDLPLTLQEEYGGWK
 NATMIDLFN DYATYCFQTFGDRVKYWITIHNPYLVAWHGFGTGMHAPGEKGNLTAVYTVGHNLKAHASKV
 WHNYDKNFRPHQKGLSITLGSHWIEPNRTDNMEDVINQCQHSMSVWGWFANPIHGDGDYPEFMKTGAMI
 PEFSEAEKEEVRGTADFFAFSFGPNNFRPSNTVVKMGQNVSLNLRQVLNWKLEYDDPQILISENGWFTD
 SYIKTEDTTAIYMMKNFLNQVLQAIKFDEIRVFGYTAWTLLDGFQWQDAYTTRRGLFYVDFNSEQKERKP
 KSSAHYKQIIQDNGFPLKESTPDMKGRFPCDFSWGVTESVLKPEFTVSSPQFTDPHLYVWNVGTGNRLY
 RVEGVRLKTRPSQCTDYVSIKKRVEMLAKMKVTHYQFALDWTSLIPTGNLSKVNQVLRYYRCVSEGLK
 LGVFPMTLYHPTHSHLGLPLLLSSGGWLNMTAKAFQDYAELCFRELGDVLKWLWITINENRNLSDMYN
 RTSNDTYRAAHNLMIAHAQVWHLYDRQYRPVQHGAVSLSLHCDWAEPANPFVDSHWKAAERFLQFEIAWF
 ADPLFKTGDYPSVMKEYIASKNQRLSSSVLPRFTAKESRLVKGTVDYFALNHFTTRFVIHKQLNTRSV
 ADRDVQFLQDITRLSSPSRLAVTPWGVKLLAWIRRNRYRDRDIYITANGIDDLALEDQIRKYYLEKYVQ
 EALKAYLIDKVKIKGYAFKLTTEKSKPRFGFFTSDFRAKSSVQFYSKLISSSGLPAENRSPACGQPAED
 TDCTICSFLVEKKPLIFFGCCFISTLAVLLSITVFHHQKRRKFQKARNLQNIPLKKGHSRVFS

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

OTI Disclaimer:	<p>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 or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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]