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Product datasheet for MR222087

Klb (NM_031180) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klb (NM_031180) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Klb
Synonyms:	AV071179; betaKlotho
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR222087 representing NM_031180
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGACAGGCTGTGCAGCAGGGTCTCCGGGGAATGAATGGATTTTCTTCAGCTCTGATGAAAGAAACA
CACGCTCTAGGAAAACAATGTCCAACAGGGCACTGCAAAGATCTGCCGTGCTGTCTGCGTTTGTTCTGCT
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TTCAAGTGGAAGGGAGTTGGAAGACAGATGGAAGAGGACCCTCGATCTGGGATCGGTACGTCTACTCACA
CCTGAGAGGTGTCAACGGCACAGACAGATCCACTGACAGTTACATCTTTCTGGAAAAAGACTTGTTGGCT
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TAGCAGCAGTGAATGCGCAAGGTCTCCGGTACTACCGTGCACTTCTGGACTCGCTGGTACTTAGGAATAT
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AAGTCCTCGGCTCATTACTACAAGCAGATCATACAAGACAACGGCTTCCCTTTGAAAGAGTCCACGCCAG
ACATGAAGGGTCGGTTCCCCTGTGATTTCTCTTGGGGAGTCACTGAGTCTGTTCTTAAGCCCGAGTTTAC
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Protein Sequence:

>MR222087 representing NM_031180
Red=Cloning site Green=Tags(s)

MKTGCAAGSPGNEWIFFSSDERNTRSRKTMSNRALQRSAVLSAFVLLRAVTGFSGDGKAIWDKKQYVSPV
NPSQLFLYDTFPKNFSWGVGTGAFQVEGSWKTDGRGPSIWDRYVYSHLRGVNGTDRSTDSYIFLEKDLLA
LDFLGVSFYQFSISWPRLFPNGTVAAVNAQGLRYYRALLDSLVLRNIEPIVTLYHWDLPLTLQEEYGGWK
NATMIDLFNDYATYCFQTFGDRVKYWITIHNPYLVAWHGFGTGMHAPGEKGNLTAVYTVGHNLIKAHSKV
WHNYDKNFRPHQKGWLSITLGSHWIEPNRTDNMEDVINCQHSMSSVLGWFANPIHGDGDYPEFMKTGAMI
PEFSEAEKEEVRGTADFFAFSFGPNNFRPSNTVVKMGQNVSLNLRQVLNWIKLEYDDPQILISENGWFTD
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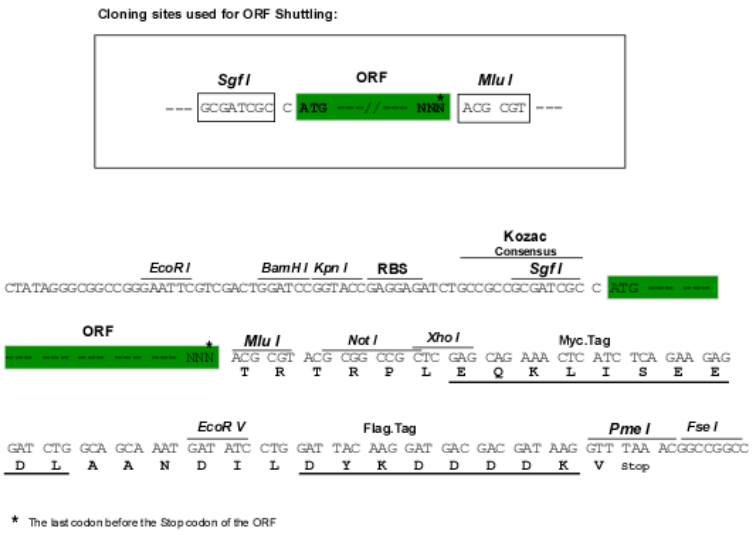
RVEGVRLKTRPSQCTDYVSIKKRVEMLAKMKVTHYQFALDWTSILPTGNLSKVNRQVLRYYRCVVSEGLK
LGVFPMVTLYHPTHSHLGLPLPLLSSGGWLNMNTAKAFQDYAELCFRELGDLVKLWITINEPNRLSDMYN
RTSNDTYRAAHNLMIAHAQVWHLYDRQYRPVQHGAVSLSLHCDWAEPANPFVDSHWKAAERFLQFEIAWF
ADPLFKTGDYPSVMKEYIASKNQRGLSSSVLPRFTAKESRLVKGTVDFYALNHFTTRFVIHKQLNTNRSV
ADRDVQFLQDITRLSSPSRLAVTPWGVRKLLAWIRRNYRDRDIYITANGIDDLALEDDQIRKYYLEKYVQ
EALKAYLIDKVKIKGYYAFKLTEEKSKPRFGFFTSDFRAKSSVQFYSKLISSSGLPAENRSPACGQPAED
TDCTICSFLVEKKPLIFFGCCFISTLAVLLSITVFHHQKRRKFQKARNLQNIPLKKGHSRVFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9012_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031180

ORF Size: 3129 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 or by calling 301.340.3188 option 3 for pricing and delivery.

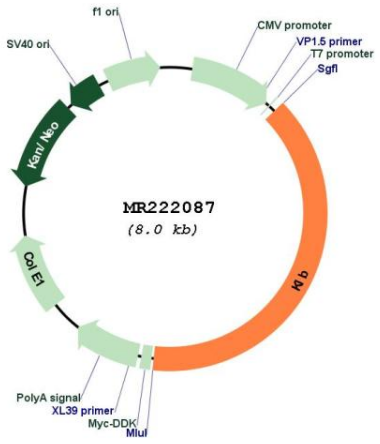
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

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_031180.2, NP_112457.1
RefSeq Size:	3439 bp
RefSeq ORF:	3132 bp
Locus ID:	83379
UniProt ID:	Q99N32
Cytogenetics:	5 C3.1
MW:	120.2 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.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222087