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Product datasheet for MG221915

Klc1 (NM_001025360) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Klc1 (NM_001025360) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Klc1
Synonyms:	AI874768; Kn; Kns2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG221915 representing NM_001025360
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTATGACAACATGTCCACCATGGTGTACATAAAGGAAGAGAAGCTGGAGAAGCTCACGCAGGATGAGA
TCATCTCTAAGACCAAGCAAGTGATCCAGGGGCTGGAAGCCCTGAAGAATGAGCACAACTCCATCCTGCA
GAGTTTGCTGGAGACGCTGAAGTGCTTGAAGAAGGATGACGAGAGCAACCTGGTGGAAGAGAAATCCAGC
ATGATCCGCAAGTCCCTGGAGATGCTGGAGCTTGGCCTGAGCGAGGCGCAGGTGATGATGGCGCTGTCCA
ATCACCTGAATGCTGTGGAGTCCGAGAAGCAAAAGCTCCGCGCTCAGGTTCGACGGCTGTGCCAGGAGAA
CCAGTGGCTGCGGGATGAGCTGGCCAACACGCAGCAGAAGTTGCAGAAGAGCGAGCAGTCGGTGGCGCAG
CTGGAGGAGGAGAAGAAACACCTGGAGTTCATGAACCAGCTGAAGAAGTACGACGACGACATCTCCCCCT
CGGAGGACAAAGACTCTGATTCTTCCAAAGAGCCGTTGGATGATCTCTTCCCAAATGACGAGGACGAACC
AGGACAAGGAATCCAGCAGCAGCACAGTAGTGCTGCGGCCGCCGCCCAGCAGGGCGGCTACGAGATCCCT
GCAAGGCTGCGCACGCTCCACAACTTGGTGATCCAGTATGCTTCACAGGGGCGTTACGAGGTGGCGGTGC
CACTCTGCAAGCAGGCCCTGGAGGATCTGGAGAAGACTTCCGGCCACGACCACCCCGATGTGGCTACCAT
GCTCAACATCTTGGCCCTGGTGTACAGGGATCAGAACAAGTATAAAGATGCAGCTAACCTCCTGAACGAC
GCCCTGGCTATCCGCGAGAAAACCCTGGGCAGAGATCACCCCGCGGTGGCAGCGACTCTGAACAACCTAG
CAGTACTGTACGGTAAGCGAGGGAAGTACAAGGAGGCGGAGCCGCTGTGTAAACGAGCCCTGGAGATCAG
GGAGAAGGTTCTGGGAAAGGATCATCCTGATGTTGCCAAACAGTTAAATAACCTGGCCCTGCTGTGCCAG
AACCAGGGCAAGTACGAGGAGGTGGAGTATTATTACCAGAGGGCCCTGGGCATCTACCAGACGAAGCTGG
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CAAGCAGGCAGAAACGCTGTACAAGGAGATTCTCACCCGCGCACACGAGCGGGAGTTTGGATCTGTGGAC
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ATGAGGTCACGTAAGCAGGGTCTTGACAATGTTCACAAACAGAGAGTGGCTGAAGTGCTAAATGACCCTG
AGAGCATGGAGAAGCGGAGGAGCCGGGAGAGTCTCAATATGGACGTGGTCAAGTACGAGAGTGGCCCTGA
CGGAGGGGAGGAAGTGAGTATGAGCGTAGAGTGGAATGGGGATGGCACTGGATCTTTAAAGCGCAGTGGC
TCCTTTAGCAAACTCCGGGCTTCCATTAGACGCAGCAGTGAGAAGCTGGTTAGGAAGCTGAAGGGAGGAA
GCTCACGGGACAGTGAGCCGAGGAACCCTGGGGCATCCCCCGCAGAGCCTCTTTGTGTGGAAAACGACAG
CAGCAGCCTAGAAGACGCTAGCACTAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

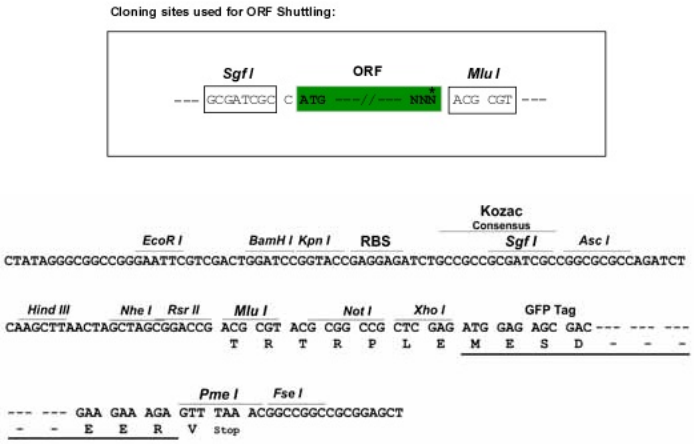
>MG221915 representing NM_001025360
Red=Cloning site Green=Tags(s)

MYDNMSTMVYIKEEKLEKLTQDEIISKTKQVIQGLEALKNEHNSILQSLLETLKCLKKDDESNLVEEKSS
MIRKSLEMLELGLSEAQVMMALSNHLNAVESEKQKLRAQVRRLCQENQWLRDELANTQQKLQKSEQSVAQ
LEEEKKHLEFMNQLKKYDDDISPSEDKDSDSSKEPLDDLFPNDEDEPGQGIQQQHSSAAAAAQQGGYEIP
ARLRTLHNLVIQYASQGRYEVAVPLCKQALEDLEKTSGHDHPDVATMLNILALVYRDQNKYKDAANLLND
ALAIREKTLGRDHPAVAATLNNLAVLYGKRGKYKEAEPLCKRALEIREKVLGKDHPDVAKQLNNLALLCQ
NQGKYEEVEYYYQRALGIYQTKLGPDDPNVAKTKNNLASCYLKQGKFKQAETLYKEILTRAHEREFGSVD
DENKPIWMHAEEREECKGKQKDGSAFGEYGGWYKACKVDSPTVTTTLKNLGALYRRQGKFEAAETLEEAA
MRSRKQGLDNVHKQRVAEVLNDPESMEKRRSRESLNMDVVKYESGPDGGEEVSMSVEWNGDGTGSLKRSG
SFSKLRASIRRSSEKLVRKLKGGSSRDSEPRNPGASPAEPLCVENDSSSLEDASTN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

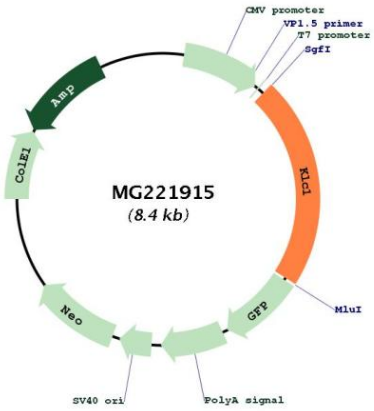
Cloning Scheme:



ACCN:	NM_001025360
ORF Size:	1848 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_001025360.2, NP_001020531.2
RefSeq Size:	2504 bp
RefSeq ORF:	1851 bp
Locus ID:	16593
Cytogenetics:	12 61.13 cM

Gene Summary: Conventional kinesin is a tetrameric molecule composed of two heavy chains and two light chains, and transports various cargos along microtubules toward their plus ends. The heavy chains provide the motor activity, while the light chains bind to various cargos. This gene encodes a member of the kinesin light chain family. It associates with kinesin heavy chain through an N-terminal domain, and six tetratricopeptide repeat (TPR) motifs are thought to be involved in binding of cargos such as vesicles, mitochondria, and the Golgi complex. Thus, kinesin light chains function as adapter molecules and not motors per se. Although previously named "kinesin 2", this gene is not a member of the kinesin-2 / kinesin heavy chain subfamily of kinesin motor proteins. Extensive alternative splicing produces isoforms with different C-termini that are proposed to bind to different cargos; however, the full-length nature of some of these variants has not been determined. [provided by RefSeq, Jul 2008]

Product images:



Circular map for MG221915