

## Product datasheet for **RC208659**

### **MKLP1 (KIF23) (NM\_004856) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MKLP1 (KIF23) (NM_004856) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MKLP1
Synonyms:	CHO1; KNSL5; MKLP-1; MKLP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC208659 representing NM\_004856  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAGTCAGCGAGAGCTAAGACACCCCGAAACCTACCGTGAAAAAGGGTCCCAAACGAACCTTAAAG  
 ACCCAGTTGGGGTATACTGTAGGGTGCGCCACTGGGCTTTCCTGATCAAGAGTGTGCATAGAAGTGAT  
 CAATAATACAACGTTCAGCTTCATACTCCTGAGGGCTACAGACTCAACCGAAATGGAGACTATAAGGAG  
 ACTCAGTATTCATTTAAACAAGTATTTGGCACTCACACCACCCAGAAGGAACTCTTTGATGTTGGGCTA  
 ATCCCTTGGTCAATGACCTCATTTCATGGCAAAAAATGGTCTTCTTTTACATATGGTGTGACGGGAAGTG  
 AAAAATCACACAATGACTGGTCTCCAGGGGAAGGAGGGCTGCTTCTCGTTGTTTGGACATGATCTTT  
 AACAGTATAGGGTCATTTCAAGCTAAACGATATGTTTTCAATCTAATGATAGGAATAGTATGGATATAC  
 AGTGTGAGGTTGATGCCTTATTAGAACGTCAGAAAAGAGAAGCTATGCCCAATCCAAAGACTTCTCTAG  
 CAAACGACAAGTAGATCCAGAGTTTGCAGATATGATAACTGTACAAGAATTCTGCAAAGCAGAAGAGGTT  
 GATGAAGATAGTGTCTATGGTGTATTTGTCTTATATTGAAATATATAAATAATTACATATATGATCTAT  
 TGGAAGAGGTGCCGTTTATGCCATAAAACCCAAACCTCCACAATCTAAATTGCTTCGTGAAGATAAGAA  
 CCATAACATGTATGTTGCAGGATGTACAGAAGTTGAAGTGAAATCTACTGAGGAGGCTTTTGAAGTTTTT  
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 TGTTCAACATTAATTAGTTCAGGCTCCCTTGGATGCAGATGGAGACAATGTCTTACAGGAAAAAGAAC  
 AATCACTATAAGTCAGTTGTCTTGGTAGATCTTGTGGAAGTGAAGAAGTAAACCGACAGAGCAGAA  
 GGGAACAGATTACGTGAAGCTGGTAATATTAATCAGTCACTAATGACGCTAAGAACATGTATGGATGTC  
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 CAAGAACTACTTTGATGGGGAAGGAAAAGTGCGGATGATCGTGTGTGAACCCCAAGGCTGAAGATTAT  
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 AGGCAATATGTGGTTAACGCCTGGGAGGAGATACAGAAACCAGCCTCGAGGTCCAGTTGGAATGAACC  
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 TGCAAACCTGAAACAGTCATGCAGCCACATGTCCCTCATGCCATCACAGTATCTGTTGCAATGAAAAGGC  
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 CTGGGACCTGGATATCAGCATCACGCACAACCCAAAGCGCAAAAAGCCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC208659 representing NM\_004856  
 Red=Cloning site Green=Tags(s)

MKSARAKTPRKPTVKKGSQTNLKDPVGVYCRVRPLGFPDQECIEVINNTTVQLHTPEGYRLNRNGDYKE  
 TQYSFKQVFGTHTTQKELFDVVANPLVNDLIHGKNGLLFTYGVTSKGTHTMTGSPGEGGLLPRCLDMIF  
 NSIGSFQAKRYVFKSNDNRNSMDIQCEVDALLERQKREAMPNPKTSSSKRQVDPEFADMINVQEFCKAEV  
 DEDSVYGVFVSYIEIYNNYIYDLEEVFPDPIKPKPPQSKLLREDKNHNMYVAGCTEVEVKSTEEAFEV  
 WRGQKKRRIANTHLNRESSRSHSVFNKLVQAPLDADGDNVLQEKEQITISQLSLVDLAGSERTNRTRAE  
 GNRLREAGNINQSLMTRLR CMDVLRNQMYGTNKMVPRD SKLTHLFKNYFDGEGKVRMIVCVNPKAEDY  
 EENLQVMRFAEVTQEVEVARPVDKAI CGLTPGRRYRNPQRPVGNELVTDVVLQSFPLPSCEILDIND  
 EQTLPRLIEALEKRHNLRQMMIDEFNKQSNAFKALLQEFDNAVL SKENHMQGKLNKMKISGQKLEIER  
 LEKKNKTLEYKIEILEKTTTIYEEDKRNLQOELETQNQKLQRQFSDKRRLEARLQGMVTETTMKWEKECE  
 RRVAQKLEMQNKLWVDEKQKQKAIIVTEPKTEKPERPSRERDREKVTQRSVSPSPVPLLFQPDQNA  
 PIRLRHRSRSAGDRWVDHKPASNMQTETVMQPHVPHAITVSVANEKALAKCEKYM LTHQELASDGEIETK  
 LIKGDYKTRGGGQSVQFTDIETLKQESPNGSRKRRSSTVAPAQPDGAESEWTDVETRCSVAVEMRAGSQ  
 LGPGYQHHAQPKRKKP

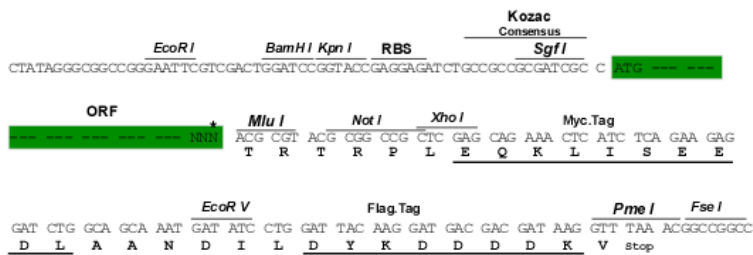
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2285\\_h01.zip](https://cdn.origene.com/chromatograms/ja2285_h01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

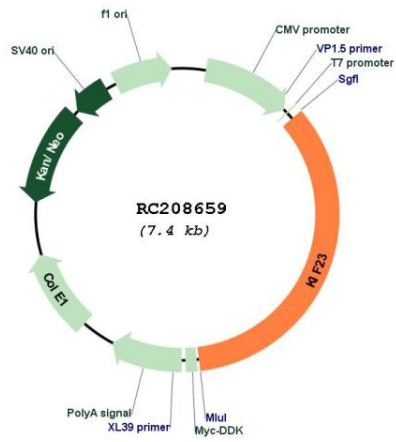
Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_004856
<b>ORF Size:</b>	2568 bp
<b>OTI Disclaimer:</b>	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>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_004856.7</a>
<b>RefSeq Size:</b>	3415 bp
<b>RefSeq ORF:</b>	2571 bp
<b>Locus ID:</b>	9493
<b>UniProt ID:</b>	<a href="#">Q02241</a>
<b>Cytogenetics:</b>	15q23
<b>Domains:</b>	kinesin
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	98.1 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a member of kinesin-like protein family. This family includes microtubule-dependent molecular motors that transport organelles within cells and move chromosomes during cell division. This protein has been shown to cross-bridge antiparallel microtubules and drive microtubule movement in vitro. Alternate splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2013]

Product images:



Circular map for RC208659