

## Product datasheet for **RC210268**

### **KLC4 (NM\_201521) Human Tagged ORF Clone**

#### **Product data:**

|                           |                                         |
|---------------------------|-----------------------------------------|
| Product Type:             | Expression Plasmids                     |
| Product Name:             | KLC4 (NM_201521) Human Tagged ORF Clone |
| Tag:                      | Myc-DDK                                 |
| Symbol:                   | KLC4                                    |
| Synonyms:                 | bA387M24.3; KNSL8                       |
| Mammalian Cell Selection: | Neomycin                                |
| Vector:                   | pCMV6-Entry (PS100001)                  |
| E. coli Selection:        | Kanamycin (25 ug/mL)                    |



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**ORF Nucleotide Sequence:**

>RC210268 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGC**C

ATGTCAGGCCTGGTGTGGGGCAGCGGGATGAGCCTGCAGGCCACCGGCTCAGCCAAGAGGAGATCCTGG  
 GGAGCACACGGCTGGTCAGCCAAGGGCTAGAGGCCCTACGCAGTGAACACCAGGCCGTGCTGCAAAAGCCT  
 GTCCCAGACCATTGAGTGTCTGCAGCAGGAGGCCATGAGGAAGGGCTGGTGCATGAGAAGGCCCGGCAG  
 CTTGCGCGTTCTATGGAAAAATTGAGCTCGGGCTGAGTGAGGCCAGGTGATGCTGGCTCTAGCCAGCC  
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 GTAAGCAGGCACTAGAGGACCTGGAGCGCACATCAGGCCGTGGCCACCCTGATGTCGCCACCATGCTCAA  
 CATCCTTGCTTTGGTGTATCGTGACCAGAATAAGTATAAGGAAGCTGCCACCTGCTGAATGATGCCCTT  
 AGCATCCGGGAGAGCACCTTGGGACCTGACCATCCTGCTGTGGCTGCCACACTCAACAATTTGGCTGTGC  
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 GGTCTTGGGCACGAATCATCCAGATGTGGCAAAACAGCTGAACAACCTGGCCCTCTTGCCAAAACCCAG  
 GGCAAGTATGAGGCCGTGGAACGCTACTACCAGCGAGCACTGGCCATCTACGAGGGGCAGCTGGGGCCGG  
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 GGCTGAGACACTATACAAGAGATCCTGACCCGTGCCCATGTACAGGAGTTTGGGTCTGTGGATGATGAC  
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 GGCTGTGGAGTGGTCCGGGGATGGCAGTGGGACCCTGCAGAGGAGTGGCTCTCTTGCAAGATCCGGGAT  
 GTGCTCCGCAGAAGCAGTGAACCTTGGTGAGGAAGCTCCAGGGGACTGAGCCTCGGCCCTCCAGCAGCA  
 ACATGAAGCGAGCAGCCTCCTTGAACATCTGAACCAACCTAGTGCAGCAGCCCTCCAGGTCTCCCGGG  
 CCTCAGTGCCAGCACCATGGACCTCTCTCAAGCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210268 protein sequence  
 Red=Cloning site Green=Tags(s)

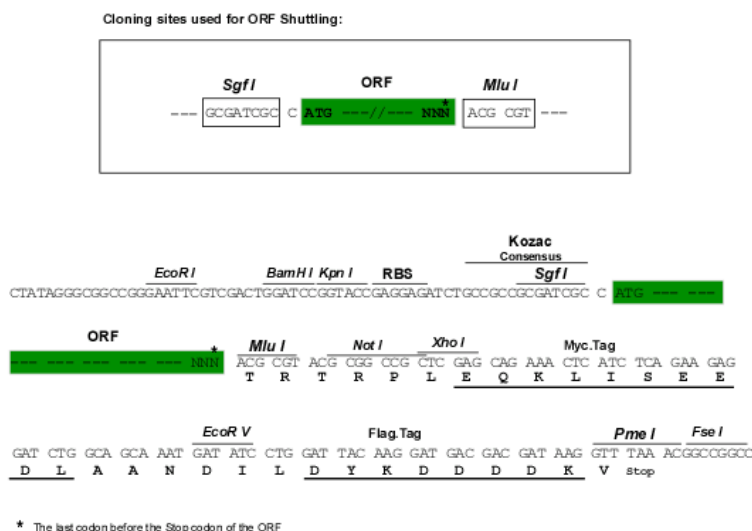
MSGLVLGQRDEPAGHRLSQEEILGSTRLVSQGLEALRSEHQAVLQSLSQTIECLQQGGHEEGLVHEKARQ  
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 EEEKKHLEFLGQLRQYDEDGHTSEEKGDATKDSLDDLPNNEEDPSNGLSRGQATAAQGGYEIPAR  
 LRTLHNLVIQYAAQGRYEVAVPLCKQALEDLERTSGRGHPDVATMLNILALVYRDQNKYKAAHLLNDAL  
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 HKPIWMHAEEREEMSKSRHHEGGTPYAEYGGWYKACKVSSPTVNTTLRNLGALYRRQGGKLEAAETLEECA  
 LRSRRQGTDPISQTKVAELLGESDGRRTSQEGPDSVKFEGGEDASVAVESWGDGSGTLQRSGSLGKIRD  
 VLRRSELLVRKLQGTETPRPSSNMKRAASLNYLNQPSAAPLQVSRGLSASTMDLSSSS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6707\\_g03.zip](https://cdn.origene.com/chromatograms/mk6707_g03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_201521

**ORF Size:** 1857 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.

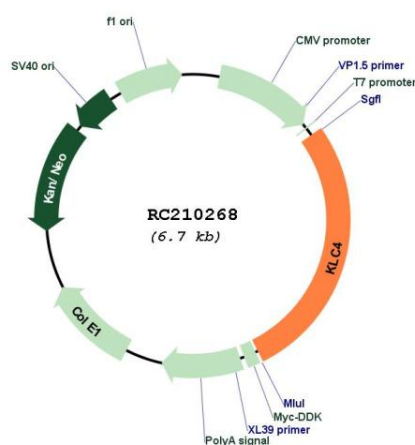
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_201521.3](#)

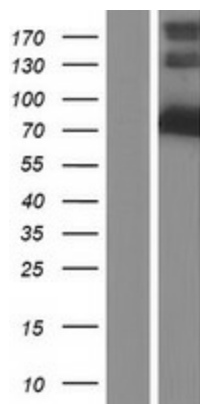
**RefSeq Size:** 2404 bp

|                   |                                                                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RefSeq ORF:       | 1860 bp                                                                                                                                                                                                                                                                   |
| Locus ID:         | 89953                                                                                                                                                                                                                                                                     |
| UniProt ID:       | <a href="#">Q9NSK0</a>                                                                                                                                                                                                                                                    |
| Cytogenetics:     | 6p21.1                                                                                                                                                                                                                                                                    |
| Protein Families: | Druggable Genome                                                                                                                                                                                                                                                          |
| MW:               | 68.6 kDa                                                                                                                                                                                                                                                                  |
| Gene Summary:     | Kinesin is a microtubule-associated force-producing protein that may play a role in organelle transport. The light chain may function in coupling of cargo to the heavy chain or in the modulation of its ATPase activity (By similarity).[UniProtKB/Swiss-Prot Function] |

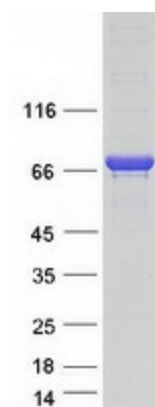
## Product images:



Circular map for RC210268



Western blot validation of overexpression lysate (Cat# [LY404435]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC217567] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KLC4 protein (Cat# [TP310268]). The protein was produced from HEK293T cells transfected with KLC4 cDNA clone (Cat# RC210268) using MegaTran 2.0 (Cat# [TT210002]).