

## Product datasheet for **SC326115**

### **KLC1 (NM\_001130107) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	KLC1 (NM_001130107) Human Untagged Clone
Tag:	Tag Free
Symbol:	KLC1
Synonyms:	KLC; KNS2; KNS2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

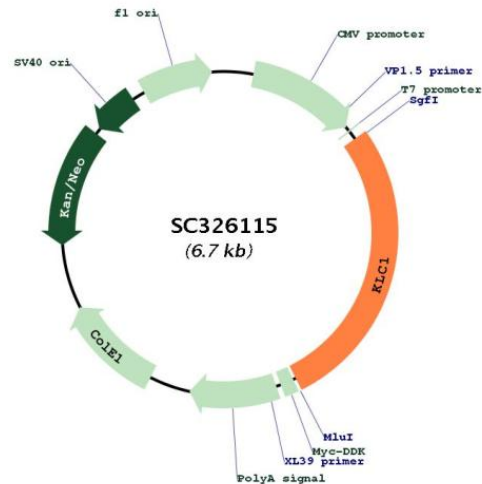


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Fully Sequenced ORF: >SC326115 representing NM\_001130107.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGTATGACAACATGTCCACAATGGTGTACATAAAGGAAGACAAGTTGGAGAAGCTTACACAGGATGAA
ATTATTTCTAAGACAAAGCAAGTAATTCAGGGGCTGGAAGCTTTGAAGAATGAGCACAATCCATTTTA
CAAAGTTTCTGGAGACACTGAAGTGTGTTGAAGAAAGATGATGAAAGTAATTTGGTGGAGGAGAAATCA
AACATGATCCGGAAGTCACTGGAGATGTTGGAGCTCGGCCTGAGTGAGGCACAGGTTATGATGGCTTTG
TCAAATCACCTGAATGCTGTGGAGTCCGAGAAGCAGAACTGCGTGCGCAGGTTTCGTGCTGTGCCAG
GAGAATCAGTGGCTACGGGATGAACTGGCCAACACGCAGCAGAACTGCAGAAGAGTGAGCAGTCTGTG
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GTCAAGTACGAGAGTGGCCCTGACGGAGGGGAGGAAGTGAATGAGCGTAGAGTGAACGGGGATGGC
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CTGTTAGGAAGCTGAAGGGAGGAAGTTCACGAGAGAGTGAAGCAAGAACCCCGGGGCGTCTCTGGCC
GAGCCTCTTTTTGTGAAAACGACAGCAGCAGCAGTGGCCTGGAAGACGCCACCGCTAAC TGA
ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001130107

**Insert Size:** 1857 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001130107.1](#)

**RefSeq Size:** 2530 bp

**RefSeq ORF:** 1857 bp

**Locus ID:** 3831

**UniProt ID:** [Q07866](#)

**Cytogenetics:** 14q32.33

**Protein Families:** Druggable Genome

**MW:** 69.8 kDa

**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 and/or biological validity of most of these variants have not been determined. [provided by RefSeq, Jul 2008]  
Transcript Variant: This variant (3) encodes isoform 3, also known as D.