OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC320281

KLC1 (NM_005552) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KLC1 (NM_005552) Human Untagged Clone
Tag:	Tag Free
Symbol:	KLC1
Synonyms:	KLC; KNS2; KNS2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene sequence for NM_005552.4
GCGGCGCAGGCGGCCGAGCGGGACTGGCTGGGTCGGCTGGGCTGCTGGTGCGAGGAGCCG
CGGGGCTGTGCTCGGCGGCCAAGGGGACAGCGCGTGGGTGGCCGAGGATGCTGCGGGGCG
GTAGCTCCGGCGCCCCTCGCTGGTGACTGCTGCGCCGTGCCTCACACAGCCGAGGCGGGC
TCGGCGCACAGTCGCTGCTCCGCGCTCGCGCCCGGCGGCGCTCCAGGTGCTGACAGCGCG
AGAGAGCGCGGCCCTCAGGAGCAAGGCGAATGTATGACAACATGTCCACAATGGTGTACA
TAAAGGAAGACAAGTTGGAGAAGCTTACACAGGATGAAATTATTTCTAAGACAAAGCAAG
TAATTCAGGGGCTGGAAGCTTTGAAGAATGAGCACAATTCCATTTTACAAAGTTTGCTGG
AGACACTGAAGTGTTTGAAGAAAGATGATGAAAGTAATTTGGTGGAGGAGAAATCAAACA
TGATCCGGAAGTCACTGGAGATGTTGGAGCTCGGCCTGAGTGAGGCACAGGTTATGATGG
CTTTGTCAAATCACCTGAATGCTGTGGAGTCCGAGAAGCAGAAACTGCGTGCGCAGGTTC
GTCGTCTGTGCCAGGAGAATCAGTGGCTACGGGATGAACTGGCCAACACGCAGCAGAAAC
TGCAGAAGAGTGAGCAGTCTGTGGCTCAACTGGAGGAGGAGAAGAAGCATCTGGAGTTTA
TGAATCAGCTAAAAAAATATGATGACGACATTTCCCCATCCGAGGACAAAGACACTGATT
CTACCAAAGAGCCTCTGGATGACCTTTTCCCCAATGATGAAGACGACCCAGGGCAAGGAA
TCCAGCAGCAGCACAGCAGTGCAGCCGCGGCTGCCCAGCAGGGCGGCTACGAGATCCCCG
CGCGGCTGCGGACGCTCCACAACCTGGTGATCCAGTACGCCTCGCAGGGGCGCTACGAGG
TAGCTGTGCCCCTCTGCAAGCAGGCCCTGGAGGACCTGGAGAAGACTTCAGGACACGACC
ACCCGGACGTGGCCACCATGCTCAACATCCTGGCCTTGGTGTACAGGGATCAGAATAAAT
ACAAAGATGCAGCTAACCTACTGAATGATGCCTTGGCTATTCGTGAGAAAACTTTGGGCA
AAGATCATCCTGCGGTGGCGGCGACTTTGAATAACCTTGCAGTCCTTTATGGTAAAAGAG
GGAAGTACAAAGAAGCAGAGCCGTTGTGTAAAAGAGCTCTGGAAATCCGAGAAAAGGTTT
TGGGGAAGGATCACCCCGATGTTGCCAAGCAGTTAAATAACTTGGCCTTACTGTGCCAGA
ACCAGGGCAAGTATGAAGAAGTAGAATATTATTATCAAAGAGCCCTCGAGATCTACCAGA
CAAAACTGGGACCTGATGACCCCAACGTGGCTAAGACGAAAAATAACCTGGCATCCTGCT
ATTTGAAACAAGGAAAGTTCAAGCAAGCAGAAACACTGTACAAAGAGATTCTCACTCGTG
CACATGAAAGGGAGTTTGGTTCTGTAGATGATGAAAATAAACCCATCTGGATGCATGCTG
AAGAAAGAGAAGAATGCAAAGGAAAGCAAAAGGATGGGACATCTTTTGGAGAGTATGGCG
GCTGGTACAAAGCCTGCAAAGTTGATAGTCCAACTGTTACAACCACTCTAAAAAACCTTG
GGGCACTTTACAGACGTCAAGGCAAATTTGAAGCTGCAGAAACGTTAGAAGAAGCTGCTA
TGAGGTCTCGTAAACAGGGTCTTGACAATGTTCACAAACAGAGGGTGGCAGAAGTGCTCA
ATGACCCTGAGAACATGGAGAAGCGCAGGAGCCGTGAGAGCCTCAACGTGGACGTGGTCA
AGTACGAGAGTGGCCCTGACGGAGGGGAGGAAGTGAGTATGAGCGTAGAGTGGAACGGGA
TGAGGAAAATGAAGCTCGGGCTGGTTAACTGACTTGCTCAGCGTCCCATGGCCTAGCCGC
CCGTGACTCTCACACTGTCTCCTGCATGACGGGTGGCGCCTCCCGCAGCTTCCCTTCTCT
CTCCAGTGCTGCCCGCTGTGTCTAGCAGCCTCTAGGATCTTGTCAGAGCTGCACCTCTCT
GTGAACTGGCCATTCCTTTCGGTGCTGCTGTCCTTTTTGGGGGGGTTCCTGATTTCTGTA
TACATGTAGCTTTGCCAGATATGTACTTAGTAATATAAACTGTATTAATAAAATCCATTT
ACTGTGTAATACACGAGTTTAAAAATTAAGAGCGATTAGCTGTTCACTTTGGTAACAGGT
AGTTAAGTGTCACACAAGGTGTTGTTGCAATGGCATGACGGTGACCTGTTGACGTAACTA
AGCCTTAGAGCAAGGCATGTGCCGCACGTGCTCCGTGGTACTTAGAGCCCTGGGGGCCCC
GCTCGGACTCCGGGTCTCCCTAGGATATGCCCCAGTAGCATTTGCTGTGTAGTCTGTGTG
TGAAATTTGGGCATTCTGCTTTTCTCTACTAATCTTGAAGTGCTCAGTGATTTGTGTATT
TGTGTCTTTCTAACTTCTAATAAACTCACTCCGACTGAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_005552

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_005552.4, NP_005543.2
RefSeq Size:	2624 bp
RefSeq ORF:	1683 bp
Locus ID:	3831
UniProt ID:	Q07866
Cytogenetics:	14q32.33
Domains:	TPR
Protein Families:	Druggable Genome
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 (1) has an alternate 3' sequence, as compared to variant 3. The resulting isoform (1, also known as C) has a shorter and distinct C-terminus, as compared to isoform 3.