

Product datasheet for **SC306673**

CASC5 (KNL1) (NM_170589) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	CASC5
Synonyms:	AF15Q14; CASC5; CT29; D40; hKNL-1; hSpcl05; MCPH4; PPP1R55; Spc7
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_170589, the custom clone sequence may differ by one or more nucleotides <pre> ATGGATGGGGTGTCTTCAGAGGCTAATGAAGAAATGACAATATAGAGAGACCTGTTAGA AGACGGCATTCTTCAATATTGAAACCCCAAGGAGTCCTCTTCAGGACCTCAGAGGTGGG AATGAAAGAGTTTCAGGAATCCAATGCTTTGAGAAATAAGAAAACTCTCGTCGAGTCAGC TTTGCAGATACTATAAAGGTATTCCAGACGGAGTCTCATATGAAATAGTGAGAAAGTCA GAAATGGAAGGCTGCAGTGCAATGGTGCCATCTCAGCTGCAACTTCTGCCTCCTGGGTTT AAGCGATTCTCCTGCCTCAGCCTCCAGAAACAGAAACAGGAGAAAAATCTCTTTTGATA CAGAATAAGAAATTAGAAGATAATTACTGTGAAATTACTGGGATGAACACATTGCTTTCT GCTCCCATTCATACCCAGATGCAACAGAAGGAGTTTCAATTATAGAACATACCCGTGAA AGGAAACATGCAAAATGACCAGACAGTCATTTTTTCAGATGAAAACAGATGGACCTGACA TCAAGTCACACTGTAATGATTACCAAAGGCCTTTTAGATAATCCCATAAAGTGAAAAAGTCC ACCAAGATAGATACCACATCATTTCTAGCTAATTTAAAGCTTCACACCGAGGACTCAAGA ATGAAAAAGAAAGTAAATTTTTCCGTGGATCAAAACACTTCTTCAGAAAATAAAATAGAT TTCAATGACTTCATAAAAGATTGAAAACAGGAAATGTAGTGCTTTTCCTGATGTGCCT GATAAAGAAAAATTTTGAGATACCTATTTATTCCAAGGAACCGAACAGTGCCTCTTCTACA CATCAAATGCATGTATCTCTTAAGGAAGATGAAAAATAACAGTAATATTACTAGGCTCTTT AGAGAAAAAGATGATGGGATGAATTCACCCAGTGTCATACAGCCAATATTTCAGACATTG ATTCACACATCCAGTGAGACCAACTCAGGGAATCTAAAGGTAATGATATTACAATTTAT GGCAATGACTTTATGGACTTGACATTTAACACACTTTGCAGATCTTACCTGCAACAGGT AATTTTTCTGAAATAGAAAAATCAAACCTCAGAAATGCCATGGATGTAACAACAGGTTATGGA ACTAAAGCTTCAGGAAATAAAACAGTTTTTAAGAGTAAACAAAATACTGCTTTTCAAGAC CTTTCCATAAACTCTGCAGACAAAAATACATATTACCAGAAGTCATATTATGGGGGCAGAA ACTCAGATAGTCTCAGAGACTTGTAATCAGGATGCCAGAAATATTAGCCATGACCCAGAA TCTATATATTCTAATCCATCTATTCAAGGTTGTAAGACTGTTTTCTATTAGTTGTAAT GATGCCATGGAAATGACCAATGTCTCTCAATATGAGAGAGGAGAAAAATTTGCTAAAG CATGACAGTAATTATGCTAAAAATGATTGCAATCCAGATGCTATGTCTTCTCTCAGAG AAAACATTTTATTCGGAGAGGAGAGAACATGGACATTACCAAGAGTCATACAGTTGCAATA GATAATCAAATTTTAAACAAGATCAATCAATGTGCAAAATAGCAGCTGCACCAACACCC GAAAAAGAAATGATGCTCCAAATCTTATGACCACATCAGAAGATGGGAAAAATGAATGTA AATTGTAACCTCAGTTCTCATGTATCTAAGGAAAGAAATACAGCAGAGCCTGTCAAATCCT TTGTCTATTTTCATTGACTGATAGAAAGACTGAACTCTTATCAGGTGAAAAATATGGATTG ACTGAAAGTCACACAAGTAACCTTAGGAAGTCAGGTTCTCTTCAGCTTATAATCTAGCA </pre>



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TACCACTAG

Restriction Sites:	Please inquire
ACCN:	NM_170589
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_170589.2, NP_733468.2</u>
RefSeq Size:	8708 bp
RefSeq ORF:	7029 bp
Locus ID:	57082
UniProt ID:	<u>Q8NG31</u>
Cytogenetics:	15q15.1
Gene Summary:	The protein encoded by this gene is a component of the multiprotein assembly that is required for creation of kinetochore-microtubule attachments and chromosome segregation. The encoded protein functions as a scaffold for proteins that influence the spindle assembly checkpoint during the eukaryotic cell cycle and it interacts with at least five different kinetochore proteins and two checkpoint kinases. In adults, this gene is predominantly expressed in normal testes, various cancer cell lines and primary tumors from other tissues and is ubiquitously expressed in fetal tissues. This gene was originally identified as a fusion partner with the mixed-lineage leukemia (MLL) gene in t(11;15)(q23;q14). Mutations in this gene cause autosomal recessive primary microcephaly-4 (MCPH4). Alternative splicing results in multiple transcript variants encoding different isoforms. Additional splice variants have been described but their biological validity has not been confirmed. [provided by RefSeq, Jan 2013] Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.