

## Product datasheet for **SC323626**

### **CILK1 (NM\_016513) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CILK1 (NM_016513) Human Untagged Clone
Tag:	Tag Free
Symbol:	CILK1
Synonyms:	ECO; EJM10; hICK; ICK; LCK2; MRK
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC323626 sequence for NM\_016513 edited (data generated by NextGen Sequencing)

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ATGAATAGATACACAACAATCAGGCAGCTCGGGGATGGAACCTACGGTCCGTCCTGCTG
GGAAGAAGCATTGAGTCTGGGGAGCTGATCGCTATTAATAAAGAAAATTTTAT
TCCTGGGAGGAATGCATGAACCTTCGGGAGGTTAAGTCTTTAAAGAAGCTCAACCATGCC
AATGTAGTCAAATTAAGAAGTTATCAGGGAAAATGATCATCTTTATTTTATCTTCGAG
TACATGAAGGAAAATCTTTACCAGCTCATTAAAGAGAGAAAATAAGTTGTTTCTGAGTCT
GCTATAAGGAATATCATGTATCAGATATTACAAGGACTCGCATTATTACAAAACACGGC
TTCTTTTATCGAGACTTAAAGCCTGAGAACCTCCTCTGCATGGGACCAGAACTTGTGAAA
ATTGCAGACTTTGGTTTGGCCCGAGAAAATACGATCAAAACCTCCATATACAGATTATGTA
TCTACCAGATGGTACAGGGCTCCAGAAGTACTCCTGAGGTCTACCAACTACAGCTCCCC
ATTGACGTCTGGGCGTGGGCTGCATCATGGCAGAAAGTTACACCCTCAGGCCACTTTC
CCTGGAGCCAGTAAAATTGACACAATATCAAAATTTGCCAAGTGTGGGGACACCAAAA
AAGACTGACTGGCCTGAAGGCTATCAACTTTCAAGTGAATGAACCTCCGTTGGCCACAG
TGTGTACCAATAACTTAAAGACCTTGATTCCCAATGCTAGCAGTGAAGCAGTCCAGCTC
CTGAGAGACATGCTTCAGTGGGATCCCAAGAAAACGACCAACAGCTAGTCAGGCACCTCGA
TATCCTTACTTCCAAGTTGGACACCCACTAGGCAGCACCACAAAACCTTCAGGATTCA
GAAAAACACAGAAAGGCATCCTGGAAAAGGCAGGCCACCTCCTTATATTAAGCCAGTC
CCACCTGCCCAGCCACCAGCCAAGCCACACACAGAAATTTCTTCAGCAGCATCAAGCC
AGCCAGCCCCCTCTGCATCTCACGTACCCTACAAAGCAGAGGTCTCCAGGACAGATCAC
CCAAGCCATCTCCAGGAGGACAAGCCAAGCCCGTTGCTTTTCCCATCCCTCCACAACAAG
CATCCACAGTCGAAAATCACAGCTGGCCTGGAGCACAAAATGGTGAGATAAAGCCAAAG
AGTAGGAGAAGGTGGGGTCTTATTTCCAGGTCAACAAAGGATTGAGATGATTGGGTGAC
TTGGATGACTTGGATTTTCAAGTCCATCCCTCAGCAGGATTGACCTGAAAAACAAGAAAAGA
CAGAGTGATGACTCTCTGAGGTTTGGAGTGTGGTGGACCTGAAGCCCTCTGAGCCT
GTGGGCACAGGAAACAGTGCCCCACCCAGACGTATATCAGCGGCGAGACACGCCACC
CTGAGACTGACAGCAAGCAGCACTATTTGAAGCACTCTCGATACTTGCCTGGGATCAGT
ATAAGAAATGGCATACTCTGAATCCAGGCAAGGAATTTATCCACCTAATCCATGGTCT
AGTTCTGGCTTGTCTGAAAAATCTTCAGGGACAATGTCAGTAATCAGCAAAGTAAATTC
GTTGGTCCAGCTCTACAAGTTCTAGTGGACTGACTGAAACTATGTCCCTTCTTTCTG
AAAAAAGAAATCGTTTCTGCTATGCAGAGGGTACACCTAGCACCTATTCCAGACCCTTC
CCTGGTATTCTCCCTGAAGGCCATGAGACCTCATCCTGGGCGACCATTCTCCACACC
CAGCCTAGAAGCACTCCTGGGTTGATACCACGGCCTCCAGCCGCCAGCCAGTGCATGGC
CGGACAGACTGGGCTTCCAAGTACGCATCTCGGCGATGA

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Clone variation with respect to NM\_016513.4

**5' Read Nucleotide Sequence:** >OriGene 5' read for mutant NM\_016513 unedited

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CCCCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTT
AGTGAA
CCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGCAATTCGGCAGAGTGAAAAACGGCCGGG
TTCTGCTGCGCTACCATGCGCCGTGCGGCCCGTGCAGTCCGCCGACCTCGCGGGCGTCCCTGTACGGA
GCCCTCGGCCGTCTAGCAGGGATTGTCCCATTTCCAGCTCCGGAGCGGGCGGCTGCGCCCCGCTCGT
CGAGGAGCTGCGCTCACCTCAGGGGCGGGCCCCCGCCTGCGTTTCGCGGCCAGCAGAAAGACTGGTTGT
TTGGAAATATGTATTTGGGAGACCAGTACGTCTTATTGAAATACCTTGTGCTGGGTGCTTGCCATCGA
AAAATTCTGGTACCCTTCTGGGGGAGGACTGCTACCCTGCAGAACTGGACCCTTCGGCCTTGAGAT
GAGGGTCCGGCCTGGAGCAAGGACACCATGAATTGGTTACACACATCAGCAGCCTGGGGAAGGAACTCA
CGTTCCGTTCTCGCGGAAAAACCTTGAATCCGGGGACGCTTATCGATATAAGAAAAGGAAGAAAATTT
TTTCGGGAGAGATGCTGACCTTCGGAAGTTAAGCTTTAAGAACTCAACAGCCATGTGTTTCATTAGGAGTT
TCCGGAAGTATCTTTTTTATTCCGTAAGGATCTTCCGCTATAAGGAATACTGTTTCGTCGCTAAGA
ATCGTTCAATTCAGCGCTATTCAACCGGG

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<b>Kinase Domain Sequence:</b>	>SC323626 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CKAMGCACATGATAGATACACAACAATCAGGCAGCTCGGGGATGGAACCTACGGTTCCTGCTGCTGGGA AGAAGCATTGAGTCTGGGAGCTGATCGCTATTATGAAAATGAAAAGAAAATTTTATTCTGGGAGGAAT GCATGAACCTTCGGGAGGTTAAGTCTTTAAAGAAGCTCAACCATGCCAATGTAGTCAAATTAAGAAGT TATCAGGAAAAATGATCATCTTTATTTTATCTTCGAGTACATGAA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_016513
<b>Insert Size:</b>	3800 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell, 2008 May p536-548.</a>
<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_016513.3</a> , <a href="#">NP_057597.2</a>
<b>RefSeq Size:</b>	6228 bp
<b>RefSeq ORF:</b>	1899 bp
<b>Locus ID:</b>	22858
<b>UniProt ID:</b>	<a href="#">Q9UPZ9</a>
<b>Cytogenetics:</b>	6p12.1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase

**Gene Summary:**

Eukaryotic protein kinases are enzymes that belong to a very extensive family of proteins which share a conserved catalytic core common with both serine/threonine and tyrosine protein kinases. This gene encodes an intestinal serine/threonine kinase harboring a dual phosphorylation site found in mitogen-activating protein (MAP) kinases. The protein localizes to the intestinal crypt region and is thought to be important in intestinal epithelial cell proliferation and differentiation. Alternative splicing has been observed at this locus and two variants, encoding the same isoform, have been identified. [provided by RefSeq, Jul 2008]  
Transcript Variant: This variant (2) has an additional exon in the 5' UTR, as compared to variant 1. Variants 1 and 2 encode the same protein.