

## Product datasheet for **SC117247**

### Coilin (COIL) (NM\_004645) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Coilin (COIL) (NM_004645) Human Untagged Clone
Tag:	Tag Free
Symbol:	Coilin
Synonyms:	CLN80; p80-coilin
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC117247 sequence for NM\_004645 edited (data generated by NextGen Sequencing)

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ATGGCAGCTTCCGAGACGGTTAGGCTACGGCTTCAATTTGATTACCCGCCGCCAGCTACC
CCGCACTGTACGGCTTCTGGTCTTGGTCGACTTGAACAGATGCCGAGTCGTCACAGAT
CTCATTAGTCTCATCCGCCAGCGCTTCGGCTTCAGTTCGGGGCCTTCTAGGCCCTAC
CTGGAGGGGGGCTCTTGCCCCCGCCGAGAGCGCGCCTTGTGAGAGACAACGACTGC
CTCAGAGTTAAATTAGAAGAGAGAGGAGTTGCTGAGAATCTGTAGTCATCAGTAATGGT
GACATTAATTTATCTCTTAGAAAAGCAAAGAAGCGGGCATTTCAGTTAGAGGAGGGTGAA
GAAACTGAACCAGATTGCAAATATTCAAAGAAGCATTGGAAGAGTCGAGAGAACAATAAC
AATAATGAGAAGGTCTTGGATCTGGAACCAAAGCTGTACAGATCAGACTGTCAGCAAA
AAAAACAAGAGAAAAAATAAGCAACCTGTGGCACAGTGGGTGATGATAACGAAGAGGCC
AAAAGAAAATCACCAAAGAAAAAGGAGAAATGTGAATATAAAAAAAGGCTAAGAATCCC
AAGTCTCCGAAAGTACAGGCAGTAAAGACTGGGCCAATCAGAGATGTAGTTCTCCAAA
GGTTCTGTAGAAACAGCCTTGTTAAAGCCAAAAGGAAAGGTAGTGAAGCGTTTGCTCA
AAAGAGAGTCCCAGTTCTCCTCGGAGTCTGAGTCTTGTGATGAATCTATCAGTATGGT
CCCAGCAAAGTCACTTTGGAGGCCAGAAATTCCTCAGAGAAATTACCAACTGAGTTATCA
AAGGAAGAACCCTCTACCAAAAATACAACTGCAGACAACTGGCTATAAACTTGGCTTT
AGCCTTACCCCGCAAGGGCAAGACCTCTGGAACAACATCTTCCAGTTCAGACTCTAGT
GCAGAGTCAGACGACCAATGCTTGTATGTCATCGAGCACCCCGAGTGTGCTGCGGGTTTC
TTAAAGACAGTAGGCCTTTTGCAGGAAGAGGTCCGAGGCCAGGGCTGTATCACAG
ACTGCAGTGTGCTGGATGGAGCGTCTGGCTCAAATGGTGGTGGACAGGCTCCTGGT
GCTTCTCCAGTGTGCTCTCCTGCTAGTTTAGGAAGAGGATGGGGTAGAGAAGAGAAC
CTTTTTCTTGGAAAGGAGCTAAGGGACGGGCATGCGGGGAGAGGTCGAGGACGAGGG
CATCCTGTTTCTGTGTTGTAATAAGCACTGACAACAGAGGCAACAGCAATTAAT
GACGTGGTAAAAAATTCATCTACTATTATCCAGATCCAGTAGAGACACCAAGAAGGAC
TATAGTCTGTTACCACTGTTAGCAGCTGCCCTCAAGTTGGAGAAAAGATTGCATTTAAG
CTTTTGGAGCTAACATCCAGTACTCTCCTGATGTCTCTGACTACAAGGAAGGAAGAATA
TTAAGCCACAATCCAGAGACCCAGCAAGTAGATATAGAAATCTTTATCCTTACCTGCC
TTGAGAGAACCTGGGAAATTTGATTTAGTTTATCACAATGAAAATGGAGCCGAGGTAGT
GAGTACGCTGTGACACAGGAGAGCAAGTCACTGTATTTTGGAAAGAGTTGATTGACCCA
AGACTGATTATTGAATCTCCAAGTAACACATCAAGTACAGAACCTGCCTGA

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Clone variation with respect to NM\_004645.2  
753 a=>g

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_004645 unedited

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GAATTTGTAATACGACTCACTATAGGGCGCCGCAATTCGGCACGAGCCTCGTGCCGAA
TTCGGCACGAGGCACCAAGCAAGATGGCAGCTTCCGAGACGGTTAGGCTACGGCTTCAAT
TTGATTACCCGCGCCAGCTACCCGCACTGTACGGCCTTCTGGCTTCTGGTCGACTTGA
ACAGATGCCGAGTCGTCACAGATCTCATTAGTCTCATCCGCCAGCGCTTCGGCTTCAGTT
CTGGGGCCTTCTAGGCCCTACCTGGAGGGGGGCTCTTGCCCCCGCCGAGAGCGCGC
GCCTTGTGAGAGACAACGACTGCCTCAGAGTTAATTAGAAGAGAGAGGAGTTGCTGAGA
ATTCTGTAGTCATCAGTAATGGTGACATTAATTTATCTCTTAGAAAAGCAAAGAAGCGGG
CATTTTCAGTTAGAGGAGGGTGAAGAACTGAACCAGATTGCAAAATTTCAAAGAAGCATT
GGAAGAGTCGAGAGAACAATAACAATAATGAGAAGGTCTTGGATCTGGAACCAAAAGCTG
TCACAGATCAGACTGTACAGCAAAAAAACAAGAGAAAAATAAAGCAACCTGTGGCACAG
TGGGTGATGATAACGAAGAGGCCAAAAGAAAATACCAAAAGAAAAGGAGAAATGTGAAT
ATAAAAAAAGGCTAAGAATCCCAAGTCTCCGAAAGTACAGGCAGTGAAGACTGGGCCA
ATCAGAGATGTAGTTCTCCAAAAGGGTCTGCTAGAAAACAGCCTTGTTAAAGCCAAAGGNA
AAGGTAGTGAAGCGTTTGTCAAAGAGAGTCCCAGTTCCTCCTCGAGTCTGAGTCTGT
GATGATCTATCAGTATGGTCCCAGCAAGTCACTTTGAC

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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_004645 unedited TGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTAGTTCAATATGATTTTATTTAAAAATGTGT ACAGCTGAAGGAGGGATCTGATCTTTTGTAAATGAAACCAATTTTACCGGTATATATTT GGCCATTTTAGCTTCGTAGTGAATAATAACAGAAAAGGAAGTTTCTGTTCAAGATCCTCA CTCCAGCACACTCAGCCAGGTGCCTGGCAAGATGACACATTTCTGGTCTGAAGCTCACA GCCAATCTCTCACTGAAGTAAACACCAATTCTCCAGGCATACACACACATACGCACAT CTTATTTTCACTGCTCTACACAGGGACCTGAGAATCCTTAATTTTAAAGTTGGGAAAAAC GTGAAAGGATTCTTAACCTATTGTCTGCGACAAATCCAACCTGTTAACTCTTAACA ATTGCAAGTATAAAATACTTGAATTTACAAGATGCTCCATTTAATGGAACAACCTCANAT GCTAAAAAATTAGGTCAAATAACATGCTTTAATATTTTTAAATGTTACTTAAAACTTATT GAGANCAGATACGCAGCACATTCTTGGTATTATAAACTCTACTGACGACTGCTACTTGA TGGCCAANAACATTTAAAGAAAGAGAAGAAACCATACTGGTATACCACAATATCTGCAAG GGATGTCATGTTTTACATTTTGTAACTGAATTAACCTGACCAAAAAACCAAGATCTA CAAAACCGACACCCATGTCATTTTAAATGATGAGGTANATNGTTTCTATGCAGTAAGGG AAGATACCAAAAAATCTCCACTTTCAAATCTTTTAAAAAAGTTGGTTTTGTCA CTTTCAAACAGACATCATAACTTTAAGTAAAGGTCTACTCAGCCGGCCTGCCTGAGGGG TACTTGAGATCAAAACAACCTGGTCCATACACTTTCCAAAAANGGATTGTTTCTGGTACA GGACCCACTCCCGTCCATTAATGGGAAATAATCAATTCCAGTTTCTAGGGGAAGTAAAA TTTATCTTGTGGTTCGT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004645
<b>Insert Size:</b>	2940 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>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_004645.2</a> , <a href="#">NP_004636.1</a>
<b>RefSeq Size:</b>	2649 bp
<b>RefSeq ORF:</b>	1731 bp
<b>Locus ID:</b>	8161
<b>UniProt ID:</b>	<a href="#">P38432</a>
<b>Cytogenetics:</b>	17q22
<b>Protein Families:</b>	Stem cell - Pluripotency

**Gene Summary:**

The protein encoded by this gene is an integral component of Cajal bodies (also called coiled bodies). Cajal bodies are nuclear suborganelles of varying number and composition that are involved in the post-transcriptional modification of small nuclear and small nucleolar RNAs. The N-terminus of the coilin protein directs its self-oligomerization while the C-terminus influences the number of nuclear bodies assembled per cell. Differential methylation and phosphorylation of coilin likely influences its localization among nuclear bodies and the composition and assembly of Cajal bodies. This gene has pseudogenes on chromosome 4 and chromosome 14. [provided by RefSeq, Jul 2008]