

## Product datasheet for **SC108364**

### DNA Polymerase epsilon (POLE3) (NM\_017443) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Polymerase epsilon (POLE3) (NM_017443) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNA Polymerase epsilon
Synonyms:	CHARAC17; CHRAC2; CHRAC17; p17; YBL1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108364 sequence for NM_017443 edited (data generated by NextGen Sequencing) ATGGCGGAGAGGCCCGAGGACCTAAACCTGCCCAATGCCGTGATCACCAGGATCATCAAG GAGGCGCTCCCGACGGTGTCAACATCTCCAAGGAGGCCCGGAGGCCATCTCCCGGCC GCCAGCGTCTTCGTGCTGTACGCCACATCCTGTGCTAACAACCTTTGCAATGAAAGGAAAAG CGGAAGACGCTGAATGCCAGTGATGTGCTCTCAGCCATGGAAGAGATGGAGTTCCAGCGG TTCGTTACCCATTGAAAGAAGCTCTGGAAGCATATAGGCGGGAGCAGAAAGGCAAGAAG GAGGCCTCAGAGCAAAAAGAAGGACAAAGACAAAAAACAGACTCGGAAGAGCAAGAC AAGAGCAGGGATGAGGACAATGATGAAGACGAAGAAAGGCTGGAAGAAGAACAAGAAT GAAGAGGAAGAAGTAGACAACCTGA

Clone variation with respect to NM\_017443.4



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_017443 unedited</p> <pre>TTGTCCTACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTGAAGCGGAGGCGA AGGGGAGTTTAAAGCCCCAGCGCGGCAATGGCGGAGAGGCCCGAGGACCTAAACCTGCC AATGCCGTGATCACCAGGATCATCAAGGAGGCGCTCCCGACGGTGTCAACATCTCCAAG GAGGCCCGGAGCGCCATCTCCGCGCCGACGCTCTTCGTGTGTACGCCACATCTGT GCTAACAACCTTTGCAATGAAAGGAAAGCGGAAGACGCTGAATGCCAGTGTGTGCTCTCA GCCATGGAAGAGATGGAGTTCAGCGGTTCCGTTACCCATTGAAAGAAGCTCTGGAAGCA TATAGGCGGGAGCAGAAAGGCAAGAAGGAGGCCCTCAGAGCAAAAGAAGAAGGACAAAGAC AAAAAACAGACTCGGAAGAGCAAGACAAGAGCAGGGATGAGGACAATGATGAAGACGAA GAAAGGCTGGAAGAAGAAGAACAGAATGAAGAGGAAGAAGTAGACAACCTGAAAAGGGCGG GAGACTGTGGCACCTTGGAAAGGTACCACTTGAAATGAGACGTGCTACGTGTTTCTGTGAA GCTTTTCCATGCTGGGCAGAGTAGTCTCAAGCAAAAGTGCCTGAAAAGATCAGAATAAAA ACTGACTAGAAATACCGTCAAACACGCACTTACCAAACCTCAGAGCATCTGAGTAGCAGA ATCCTGTTTTGCTTCATCAATCCTGAAGTTATGGCCTTNTGACAGAAGGGATTCTGAACG ACTAAATTAGTCAGTTTGTCTCGCTTTTGTACTTNAAGTATGGNTAGAAGGGTTTTTG ATCTGAAGTCCTCCTAGTCCCCCAAATAGTATAATAACTCCATGCTGCCTGTGTGGTCC AAANACAGAGCAGCCAAGCTAC</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_017443 unedited</p> <pre>CGAGGCCGCAATTTATATCGAGTTTTTTTTTTTTTTTTTTTTTAAACAAAACCTTTATTTGTAC AAAGCATTACAATCTTCTCAGCATTCTTCACTCACAAAACCTTTCACTGTATTTAACAAAGT TAACAGTGTCAAACCTACACGTCACCTGTCAAACCCCAAGCACTCAACTTAGAAACAA AAAGCGCTTGGAGCACTGAATGGAAACAGAAAAAGGCTAAGAAAGGCCAACAGAGATATT TTAGAAGCAGTTAAAGAGGATGGTTTAGGGAGAGTTAGATTCCTGAGCACCATCAGATTT CCCTTAAGGTTTTTGGCAAGGGGCTCCACAAAATAATTTTTAGAAAGACATGAGACAAAA TTAGCCAGGCTTGGTGGCACGCATCTGTAGACCCAGATACTCAGGAGGCTCAGGCGGGAG GATCACCTGAGCCAGGATTTCAAGGATGCAATGAGCTATGATCATGCCACTGCACTCCA GCCTGGGCCACAGAGTGAGAGACTCCATCTGCTTAAAACAAAACGTGAGATTATAACTAA CGAATTAAGAGATCAGAGGAACCTCACACTTTGGAGTATTAAGCAGGCTATTAAGCTTAC AGACTGACCGAAGTGAGAAAAGGAGGCGCATGACAAAAGCAGGATGGGGCACTACAAGAC ACGCCCCGAGAACAGAAACGACCCAGCCGGCTCTCAAGGGCGAAAACCTGCCCGTAAA GAAACATCAAGATTCGCCCTCCCTTCGTGACTTGTCCGAATGTACAAGCCCTACCCGC CTACACTTGCGACGACCCACCTAACTAACACGAGGCAACCGCTGGGTGCTTACCCCT TACCGCTAGGGGGTAGACAAATTAAGCTGACCCCAACACACGATAAAATAAGGCGC ACCCTGGCACCTATAGTACTAGTGATATTTGGATAAACAAAACCTGCCGACATTGTCGTGG CCTTACACACCTACGCCATGGCCGAATAGAAGAACAATGGG</pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_017443
<b>Insert Size:</b>	2220 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).

**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\\_017443.3](#), [NP\\_059139.2](#)

**RefSeq Size:** 2185 bp

**RefSeq ORF:** 444 bp

**Locus ID:** 54107

**UniProt ID:** [Q9NRF9](#)

**Cytogenetics:** 9q32

**Domains:** CBFD\_NFYB\_HMF

**Protein Pathways:** Base excision repair, DNA replication, Metabolic pathways, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism

**Gene Summary:** POLE3 is a histone-fold protein that interacts with other histone-fold proteins to bind DNA in a sequence-independent manner. These histone-fold protein dimers combine within larger enzymatic complexes for DNA transcription, replication, and packaging.[supplied by OMIM, Apr 2004]

Transcript Variant: This variant (1) represents the longer protein-coding transcript. Variants 1 and 2 both encode the same protein.