

## Product datasheet for **RG200874**

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** DNA Polymerase epsilon (POLE3) (NM\_017443) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** POLE3  
**Synonyms:** CHARAC17; CHRAC2; CHRAC17; p17; YBL1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG200874 representing NM\_017443  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGAGAGGCCCGAGGACCTAAACCTGCCAATGCCGTGATCACCAGGATCATCAAGGAGGCGCTCC  
CGGACGGTGTCAACATCTCAAGGAGGCCCGGAGCGCCATCTCCCGCGCCCGCAGCGTCTTCGTGTGTA  
CGCCACATCCTGTGCTAACAACTTTGCAATGAAAGGAAAGCGGAAGACGCTGAATGCCAGTGTGCTC  
TCAGCCATGGAAGAGATGGAGTTCAGCGGTTTCGTTACCCATTGAAAGAAGCTCTGGAAGCATATAGGC  
GGGAGCAGAAAGCAAGAAGGAGGCCTCAGAGCAAAGAAGAAGGACAAAGACAAAAAACAGACTCGGA  
AGAGCAAGACAAGAGCAGGGATGAGGACAATGATGAAGACGAAGAAGGCTGGAAGAAGAAGCAAGAT  
GAAGAGGAAGAAGTAGACAAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG200874 representing NM\_017443  
Red=Cloning site Green=Tags(s)  
MAERPEDLNL PNAVITRIKEALPDGVNISKEARSAISRASVFLYATSCANNFAMKGRKTLNASDVL  
SAMEEMEFQRFVTPLEALEAYRREQKGGKEASEQKKKDKDKTDSEEQDKSRDEDNDEDEERLEEEEQN  
EEEEVDN

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI

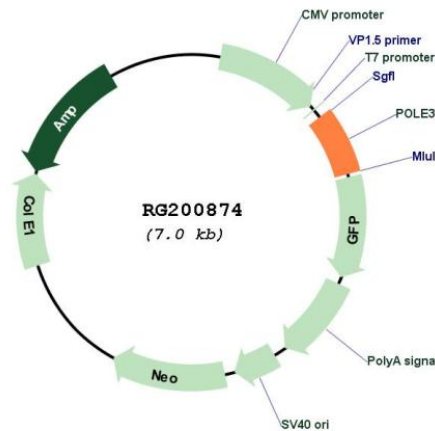


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM\_017443

ORF Size: 441 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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_017443.5</a>
<b>RefSeq Size:</b>	2185 bp
<b>RefSeq ORF:</b>	444 bp
<b>Locus ID:</b>	54107
<b>UniProt ID:</b>	<a href="#">Q9NRF9</a>
<b>Cytogenetics:</b>	9q32
<b>Domains:</b>	CBFD_NFYB_HMF
<b>Protein Pathways:</b>	Base excision repair, DNA replication, Metabolic pathways, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism
<b>Gene Summary:</b>	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]