

Product datasheet for RC236042

DNA Polymerase epsilon (POLE3) (NM_001278255) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: DNA Polymerase epsilon (POLE3) (NM_001278255) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: POLE3
Synonyms: CHARAC17; CHRAC2; CHRAC17; p17; YBL1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC236042 representing NM_001278255
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGAGAGGCCCGAGGACCTAAACCTGCCAATGCCGTGATCACCAGGATCATCAAGGAGGCGCTCC
 CGGACGGTGTCAACATCTCCAAGGAGGCCCGGAGCGCCATCTCCGCGCCGCCAGCGTCTTCGTGTGTA
 CGCCACATCCTGTGCTAACAACTTTGCAATGAAAGGAAAGCGGAAGACGCTGAATGCCAGTGATGTGCTC
 TCAGCCATGGAAGAGATGGAGTTCCAGCGTTCGTTACCCATTGAAAGAAGCTCTGGAAGCATATAGGC
 GGGAGCAGAAAGCAAGAAGGAGGCCTCAGAGCAAAAGAAGAAGGACAAAGACAAAAAACAGACTCGGA
 AGAGCAAGACAAGAGCAGGGATGAGGACAATGATGAAGACGAAGAAGGCTGGAAGAAGAAGACAGAAT
 GAAGAGGAAGAAGTAGACAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236042 representing NM_001278255
 Red=Cloning site Green=Tags(s)
 MAERPEDLNLNAVITRIIKEALPDGVNISKEARSASISRAASVFLYATSCANNFAMKGRKTLNASDVL
 SAMEEMEFQRFVTPLEALEAYRREQKGGKEASEQKKKDKKTDSEEQDKSRDEDNDEEERLEEEEQN
 EEEVDN

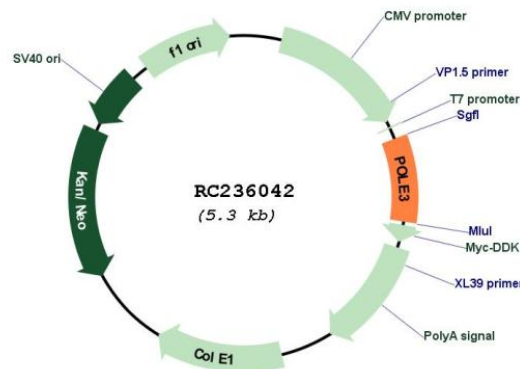
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001278255

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.

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:	<ol style="list-style-type: none">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:	<u>NM_001278255.1, NP_001265184.1</u>
RefSeq Size:	2258 bp
RefSeq ORF:	444 bp
Locus ID:	54107
UniProt ID:	<u>Q9NRF9</u>
Cytogenetics:	9q32
Protein Pathways:	Base excision repair, DNA replication, Metabolic pathways, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism
MW:	17.3 kDa
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]