

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for RC200874

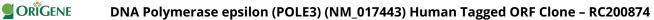
DNA Polymerase epsilon (POLE3) (NM_017443) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Polymerase epsilon (POLE3) (NM_017443) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNA Polymerase epsilon
Synonyms:	CHARAC17; CHRAC2; CHRAC17; p17; YBL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>>RC200874 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGCGGAGAGGCCCGAGGACCTAAACCTGCCCAATGCCGTGATCACCAGGATCATCAAGGAGGCGCTCC CGGACGGTGTCAACATCTCCAAGGAGGCCCGGAGCGCCATCTCCCGCGCCGCCAGCGTCTTCGTGCTGTA CGCCACATCCTGTGCTAACAACTTTGCAATGAAAGGAAAGCGGAAGACGCTGAATGCCAGTGATGTGCTC TCAGCCATGGAAGAGATGGAGTTCCAGCGGTTCGTTACCCCATTGAAAGAAGCTCTGGAAGCATATAGGC GGGAGCAGAAAGGCAAGAAGGAGGCCTCAGAGCAAAAGAAGAAGGACAAAAAAAA
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG GTTTAA
Protein Sequence:	<pre>>RC200874 protein sequence Red=Cloning site Green=Tags(s)</pre>
	MAERPEDLNLPNAVITRIIKEALPDGVNISKEARSAISRAASVFVLYATSCANNFAMKGKRKTLNASDVL SAMEEMEFQRFVTPLKEALEAYRREQKGKKEASEQKKKDKDKKTDSEEQDKSRDEDNDEDEERLEEEEQN EEEEVDN
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6821_f08.zip



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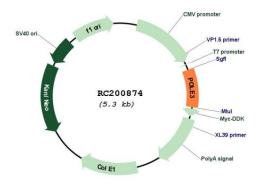


Server is an average of the same decide of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info DTI Annotation: 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). Ceconstitution Method: 1. Centrifuge at 5,000xg for 5min. Sclose the tube and incubate for 10 minutes at room temperature. 3. Store the tube and incubate for 10 minutes at room temperature. Sclose the tube and incubate for 120 minutes at room temperature. 3. Store the suspended at -20°C.	Restriction Sites:	Sgfl-Mlul
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Locitivity Description	Cloning Scheme:	Sgfi ORF Miul
Image of the second		EcoRI BamHI Kpn I RBS Sgf I
are too ac too are too		MILLI NOT AND MYC.LAG MyC.LAG
ACCN:NM_017443DRF Size:441 bpDTI 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 		gat ctg gca gca aat gat atc ctg gat tac aag gat gac gac gac gat aag gtt taa acggeoggeo
DRF Size:441 bpDTI 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 infoDTI Annotation:This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.DTO 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: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:MM 017443.5RefSeq Size:2288 bpRefSeq ORF:444 bp		* The last codon before the Stop codon of the ORF
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 infoOTI Annotation:This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.OTI Annotation: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 Size:2288 bpRefSeq ORF:444 bp	ACCN:	NM_017443
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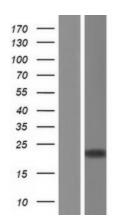
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	DNA Polymerase epsilon (POLE3) (NM_017443) Human Tagged ORF Clone – RC200874
UniProt ID:	<u>Q9NRF9</u>
Cytogenetics:	9q32
Domains:	CBFD_NFYB_HMF
Protein Pathways	Base excision repair, DNA replication, Metabolic pathways, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism
MW:	16.9 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]

Product images:

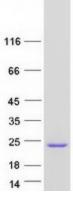


Circular map for RC200874



Western blot validation of overexpression lysate (Cat# [LY413749]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200874 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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Coomassie blue staining of purified POLE3 protein (Cat# [TP300874]). The protein was produced from HEK293T cells transfected with POLE3 cDNA clone (Cat# RC200874) using MegaTran 2.0 (Cat# [TT210002]).

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