

Product datasheet for **RC209816**

DNA Polymerase lambda (POLL) (NM_013274) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Polymerase lambda (POLL) (NM_013274) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DNA Polymerase lambda
Synonyms:	BETAN; POLKAPPA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC209816 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGATCCAGGGGTATCTTGAAGGCATTTCCAAGCGGCAGAAAATTCATGCTGATGCATCATCAAAG
 TACTTGCAAAGATTCTAGGAGGGAAGAGGGAGAAGAAGCAGAAGAGTGGCTGAGCTCCCTTCGGGCCA
 TGGTGTGCGCACTGGCATTGGACGAGCCCGGCAGAACTTTGAGAAGCAGATTGTTCCAGCATGGCGGC
 CAGCTATGCCCTGCCAGGGCCAGGTGTCACTCACATTGGTGGATGAAGGCATGGACTATGAGCGAG
 CCCTCCGCTTCTCAGACTACCCAGCTGCCCCGGGTGCTCAGCTGGTGAAGTCAGCCTGGCTGAGCTT
 GTGCCCTCAGGAGAGGAGGCTGGTGGATGTAGCTGGATTGAGCATCTTCATCCCCAGTAGTACTTGGAC
 CATCCACAGCCCAGCAAGGCAGAGCAGGATGCTTCTATTCTCCTGGCACCCATGAGGCCCTGCTTCAGA
 CAGCCCTTCTCCTCCTCCTCCACCAGGCCTGTGTCTCCTCCCAAAGGCAAAAGAGGCACCAAA
 CACCCAAGCCCAGCCATCTCTGATGATGAAGCCAGTGTGGGGAAGAAACCAGTTAGTGCAGCTGAT
 CTGGAAGCCCTCATCAGTGGCCACTACCCACCTCCCTTGAGGGAGATTGTGAGCCTAGCCAGCCCTG
 CTGTCCTGGATAAGTGGGTCTGTGCACAGCCCTCAAGCCAGAAGGCGACCAATCACAACTCCATATCAC
 AGAGAAGCTGGAAGTTCTGGCCAAAGCCTACAGTGTTCAGGGAGACAAGTGGAGGGCCCTGGGCTATGCC
 AAGGCCATCAATGCCCTCAAGAGCTTCCATAAGCCTGTCACCTCGTACCAGGGGGCTGCAGTATCCCTG
 GGATTGGGAAGCGGATGGCTGAGAAAATCATAGAGATCCTGGAGAGCGGGCATTTCGGGAAGCTGGACCA
 TATCAGTGAGAGCGTGCCTGTCTTGGAGCTTCTCCAACATCTGGGAGCTGGGACCAAGACTGCCAG
 ATGTGGTACCAACAGGGCTTCCGAAGTCTGGAAGACATCCGAGCCAGGCCTCCCTGACAACCCAGCAGG
 CCATCGGCTGAAGCATTACAGTGACTTCTGGAACGTATGCCAGGGAGGAGGCTACAGAGATTGAGCA
 GACAGTCCAGAAAAGCAGCCAGGCCTTTAACTCTGGGCTGCTGTGTGGCATGTGGTTCAATACCGACGG
 GAAAGGCGACCTGTGGTGTGTCGACGTGCTCATCACTACCCAGATGGCCGGTCCCACCGGGGTATCT
 TCAGCCGCTCCTTGACAGTCTTCGGCAGGAAGGGTTCCTCACAGATGACTTGGTGGAGCCAAAGAGGAGAA
 TGGTCAGCAACAGAAGTACTTGGGGGTGTGCCGGCTCCAGGGCCAGGGCGGGCACCAGGCGCTGGAC
 ATCATCGTGGTGCCTATAGCGAGTTTGCCTGTGCCCTGCTCTACTTCACCGGCTCTGCACACTTCAACC
 GCTCCATGCGAGCCCTGGCCAAAACCAAGGGCATGAGTCTGTGAGAACATGCCCTCAGCACTGCTGTGGT
 CCGGAACACCCATGGCTGCAAGGTGGGGCTGGCCGAGTGTGCCACTCCCACTGAGAAGGATGTCTTC
 AGGCTCTTAGGCCTCCCCTACCGAGAACCTGCTGAGCGGGACTGG

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209816 protein sequence
 Red=Cloning site Green=Tags(s)

MDPRGILKAFPKRQKIHADASSKVLAKIPRREEGEEAEEWLSLRAHVVRTGIGRARAELFEKQIVQHGG
 QLCPAQPGVTHIVVDEGMDYERALLRLLPQLPPGAQLVKSASLSLCLQERRLDVAVGFSIFIPSRYLD
 HPQPSKAEQDASIPPGTHEALLQTALSPPPPTRPVSPQKAKEAPNTQAQPISSDDEASDGEETQVSAAD
 LEALISGHYPTSLEGDCEPSPAPAVLDKWVCAQPSSQKATNHNHHITEKLEVLAKAYSVQGDKWALGYA
 KAINALKSFHKPVTSYQACSIPIGIGKMAEKIIEILESGHLRKLHDHISESVPVLELFSNIWAGTKTAQ
 MWYQQGFRSLEDIRSQASLTTQQAIGLKHYSDFLERMPREEATEIEQTVQKAAQAFNSGLLCVACGSYRR
 GKATCGDVDVLI THPDGRSHRGIFSRLLDSLRLQEGFLTDDLVSQEENGQQQKYLGVCRLLPGPGRRHRLD
 IIVVPYSEFACALLYFTGSAHFNRSMRALAKTKGMSLSEHALSTAVVRNTHGCKVGPGRVLPPTTEKDVF
 RLLGLPYREPAERDW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6530_d06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_013274

ORF Size: 1725 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:

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_013274.3](#)

RefSeq Size: 2741 bp

RefSeq ORF: 1728 bp

Locus ID: 27343

UniProt ID: [Q9UGP5](#)

Cytogenetics: 10q24.32

Domains: POLXc

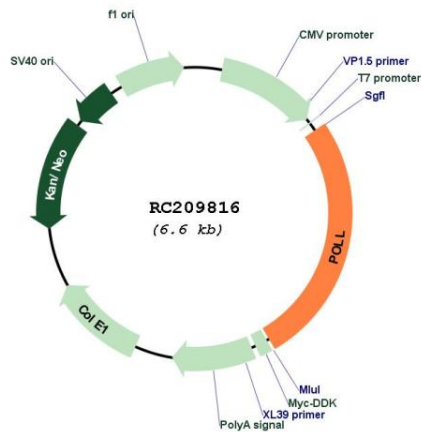
Protein Families: Druggable Genome

Protein Pathways: Base excision repair, Non-homologous end-joining

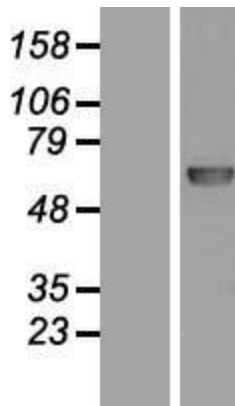
MW: 63.4 kDa

Gene Summary: This gene encodes a DNA polymerase. DNA polymerases catalyze DNA-template-directed extension of the 3'-end of a DNA strand. This particular polymerase, which is a member of the X family of DNA polymerases, likely plays a role in non-homologous end joining and other DNA repair processes. Alternatively spliced transcript variants have been described. [provided by RefSeq, Mar 2010]

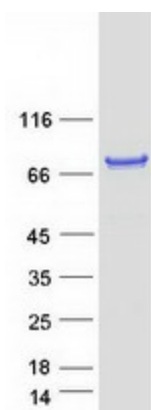
Product images:



Circular map for RC209816



Western blot validation of overexpression lysate (Cat# [LY415693]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209816 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified POLL protein (Cat# [TP309816]). The protein was produced from HEK293T cells transfected with POLL cDNA clone (Cat# RC209816) using MegaTran 2.0 (Cat# [TT210002]).