

Product datasheet for **RC223072**

POLD3 (NM_006591) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POLD3 (NM_006591) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POLD3
Synonyms:	P66; P68; PPP1R128
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223072 representing NM_006591
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGGACCAGCTTTATCTGGAAAATATAGACGAGTTCGTACGGACCAAAACAAGATCGTGACATACA
 AATGGCTGAGCTATACACTAGGGGTTTCATGTTAACCCAGGCCAAACAGATGCTGTATGATTATGTTGAAAG
 GAAACGAAAAGAAAATTCAGGAGCCCAACTGCATGTTACCTACTTGGTGTCTGGCAGTCTCATTCAAGT
 GGACATTCCTGCCACAAGTTGCAGTAGTGAGAGAAGATAAAATTGGAAGCAGTGAAGTCCAAGCTAGCTG
 TGACTGCCAGCATCCATGTGTACAGCATCCAGAAAGCCATGCTAAAGGACAGTGGGCCTCTGTTCAATAC
 TGACTATGACATCCTTAAAGCAACTTGCAGAAGTGCAGCAAATTTAGTGTATAACAATGTGCAGCTGCC
 GTCCTAGAGCTCCTGCTGAATCCTCTTCGCTTCCAAAAAGTTTGGCAGTACATCTTCACATGTCAA
 GTGAGACACAAGCCAACAATGAGCTGACCACCAATGGTCAATGGCCACCTGCATCCAAGCAGTTTCCCA
 GCAGCCAAAGGAATTATGGGAATGTTTGCCTCCAAAGCTGCTGCTAAAACCAAGAAACCAACAAGGAA
 ACGAAAACAGAGGCTAAAGAAGTAAACAATGCATCTGCAGCAGGCAACAAGGCACCGGAAAGGGAATA
 TGATGAGCAACTTTTTGGAAAAGCTGCTATGAATAAAATTTAAAGTCAATTTGGACTCAGAAACAAGCAGT
 GAAAGAAGAAAAATAGTGGAGCAGCCTACAGTGTCTGTACGGAACCAAGCTGGCAACTCCTGCAGGC
 CTGAAAAATCCAGCAAAAAAGCAGAGCCTGTTAAGGTGCTGCAGAAGGAAAAAAGGGGGAAGCGAG
 TAGCATTATCTGATGATGAGACAAAGGAAACTGAAAACATGAGGAAAAAGAGGAGAAGAATCAAACCTCC
 TGAATCTGATAGCAGTGAAGTGAAGTCTTCCAGACTCCTGGGGCTTATGAAGCTGAGTCACCATCC
 CCACCTCCTCCTCGTCTCCACCTCTTGAACAGTGCAGAAAGCTGAGCCTGAACCTCCTCTGTCAAGA
 GCTCAAGTGGAGAAAAAAGAAAACGAAAACGCGTACTAAAATCTAAAACCTACCTGGATGGGGAAGG
 CTGCATAGTGACTGAAAAAGTCTACGAGAGTGAATCCTGCACAGATAGTGAAGAGGAGCTTAACATGAAG
 ACATCCTCAGTACACAGACCCCTGCCATGACTGTGAAAAAGAACCAGAGAGGAAACGAAAGGGCCCA
 AGAAAGGGACTGCTGCTCTGGGCAAGCCAACAGACAGGTGCCATTACTGGCTTCTCCAGAGGAAA

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC223072 representing NM_006591
 Red=Cloning site Green=Tags(s)

MADQLYLENIDFVTDQNKIVTYKWL SYTLGVHVNQAKQMLYDYVERKREKENSQAQLHVTYL VSGSLIQN
 GHSCHKVAVVREDKLEAVKSKLAVTASIHVYSIQKAMLKDSGPLFNTDYDILKSNLQNSKFSAIQCAA
 VPRAPAESSSSSKKFEQSHLHMSSETQANNELTTNGHGPPASKQVSQPKGIMGMFASKAAKTQETNKE
 TKTEAKEVTNASAAAGNKAPGKGNMMSNFFGKAAMNKFVNLDSEQAVKEEKIVEQPTVSVTEPKLATPAG
 LKKSSKKAEPVKVLQKEKRGKRVALSDDETKETENMRKRRRIKLPESDSSSEDEVFPDSPGAYEAESPS
 PPPPPSPLEPVKTEPEPPSVKSSSGENKRKRVRVLSKTYLDGEGCIVTEKVYESECTDSEELNMK
 TSSVHRPPAMTVKKEPREERKGPVKGTAAALGKANRQVSITGFFQRK

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8046_c07.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_006591

ORF Size: 1398 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

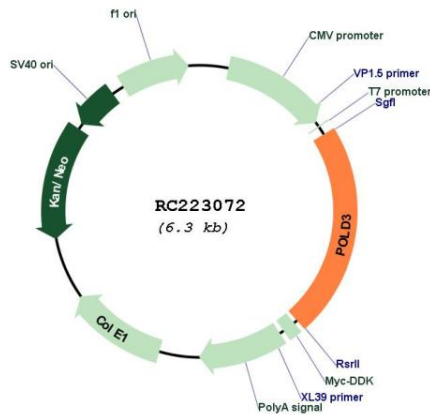
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_006591.3](#)
RefSeq Size: 3430 bp
RefSeq ORF: 1401 bp
Locus ID: 10714
UniProt ID: [Q15054](#)
Cytogenetics: 11q13.4
Protein Pathways: Base excision repair, DNA replication, Homologous recombination, Metabolic pathways, Mismatch repair, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism
MW: 51.2 kDa

Gene Summary: This gene encodes the 66-kDa subunit of DNA polymerase delta. DNA polymerase delta possesses both polymerase and 3' to 5' exonuclease activity and plays a critical role in DNA replication and repair. The encoded protein plays a role in regulating the activity of DNA polymerase delta through interactions with other subunits and the processivity cofactor proliferating cell nuclear antigen (PCNA). Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Mar 2012]

Product images:



Circular map for RC223072