

# **Product datasheet for SC303795**

# POLD3 (NM\_006591) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** POLD3 (NM\_006591) Human Untagged Clone

Tag: Tag Free
Symbol: POLD3

**Synonyms:** P66; P68; PPP1R128

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

#### OriGene Technologies, Inc.

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**Fully Sequenced ORF:** 

>SC303795 representing NM\_006591.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGGATCGCC

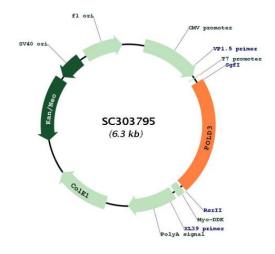
ATGGCGGACCAGCTTTATCTGGAAAATATAGACGAGTTCGTCACGGACCAAAACAAGATCGTGACATAC AAATGGCTGAGCTATACACTAGGGGTTCATGTTAACCAGGCCAAACAGATGCTGTATGATTATGTTGAA AGGAAACGAAAAGAAAATTCAGGAGCCCAACTGCATGTTACCTACTTGGTGTCTGGCAGTCTCATTCAG AATGGACATTCCTGCCACAAGGTTGCAGTAGTGAGAGAAGATAAATTGGAAGCAGTGAAGTCCAAGCTA GCTGTGACTGCCAGCATCCATGTGTACAGCATCCAGAAAGCCATGCTAAAGGACAGTGGGCCTCTGTTC AATACTGACTATGACATCCTTAAAAGCAACTTGCAGAACTGCAGCAAATTTAGTGCTATACAATGTGCA GCTGCCGTCCCTAGAGCTCCTGCTGAATCCTCTTCGTCTTCCAAAAAGTTTGAGCAGTCACATCTTCAC ATGTCAAGTGAGACACAAGCCAACAATGAGCTGACCACCAATGGTCATGGCCCACCTGCATCCAAGCAG GTTTCCCAGCAGCCCAAAGGAATTATGGGAATGTTTGCCTCCAAAGCTGCTACAAACCCAAGAAACC AACAAGGAAACGAAAACAGAGGCTAAAGAAGTAACAAATGCATCTGCAGCAGGCAACAAGGCACCAGGG AAAGGGAATATGATGAGCAACTTTTTTGGAAAAGCTGCTATGAATAAATTTAAAGTCAATTTGGACTCA AGAATCAAACTTCCTGAATCTGATAGCAGTGAAGATGAAGTCTTTCCAGACTCTCCTGGGGCTTATGAA GCTGAGTCACCATCCCCACCTCCTCCGTCTCCACCTCTTGAACCAGTGCCAAAGACTGAGCCTGAA CCTCCTTCTGTCAAGAGCTCAAGTGGAGAAAACAAAAGAAAACGAAAACGCGTACTAAAATCTAAAACT TACCTGGATGGGGAAGGCTGCATAGTGACTGAAAAAGTCTACGAGAGTGAATCCTGCACAGATAGTGAA GAGGAGCTTAACATGAAGACATCCTCAGTACACAGACCCCCTGCCATGACTGTGAAAAAAAGAACCCAGA GGCTTCTTCCAGAGGAAATAA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGAT
ATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** 

Sgfl-RsrII

Plasmid Map:



**ACCN:** NM\_006591

**Insert Size:** 1401 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 <a href="mailto:customercom">customercom</a> 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. <u>More info</u>

**OTI Annotation:** 

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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:** <u>NM 006591.2</u>

 RefSeq Size:
 3824 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: 51.4 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] Transcript Variant: This variant (1) is protein-coding.