

Product datasheet for RG231562

POLD4 (NM 001256870) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: POLD4 (NM_001256870) Human Tagged ORF Clone

Tag: **TurboGFP** Symbol: POLD4

Synonyms: p12; POLDS **Mammalian Cell**

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG231562 representing NM_001256870 Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

Neomycin

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGCCGGAAGCGGCTCATCACTGATTCCTACCCGGTTGTGAAGAGGAGGGGGGGCCCGCTGGGCACA GCAAGGGGGAGCTGGCACCCGAGCTAGGGGAGGAGCCCCAGCCCCGCGACGAGGAGGAAGCCGAGCTGGA GCTGCTGAGGCAGTTTGACCTGGCCTGGCAGTACGGGCCCTGCACCGTCTCTGGCATCTCTATCCCCTAT

GAGGCACCACGTAAGACCTCCTGCCCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231562 representing NM_001256870

Red=Cloning site Green=Tags(s)

MGRKRLITDSYPVVKRREGPAGHSKGELAPELGEEPQPRDEEEAELELLRQFDLAWQYGPCTVSGISIPY

EAPRKTSCP

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



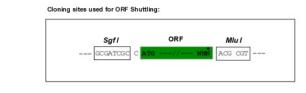
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

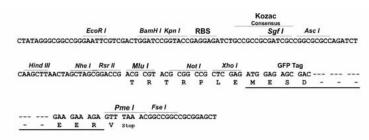
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

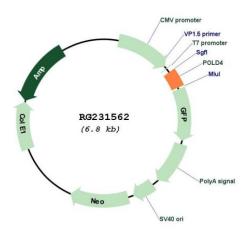


Cloning Scheme:





Plasmid Map:



ACCN: NM_001256870

ORF Size: 237 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



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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: <u>NM 001256870.1</u>, <u>NP 001243799.1</u>

RefSeq Size: 1639 bp
RefSeq ORF: 240 bp
Locus ID: 57804
UniProt ID: Q9HCU8
Cytogenetics: 11q13.2

Protein Pathways: Base excision repair, DNA replication, Homologous recombination, Metabolic pathways,

Mismatch repair, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism

Gene Summary: This gene encodes the smallest 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 enhances the activity of DNA polymerase delta and plays a role in fork repair and stabilization through interactions with the DNA helicase Bloom syndrome protein. Alternatively spliced transcript variants encoding multiple isoforms

have been observed for this gene. [provided by RefSeq, Mar 2012]