

## Product datasheet for **SC323085**

### DNA polymerase delta p50 (POLD2) (NM\_001127218) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNA polymerase delta p50 (POLD2) (NM_001127218) Human Untagged Clone
Tag:	Tag Free
Symbol:	POLD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC323085 representing NM_001127218. Blue=Insert sequence Red=Cloning site Green=Tag(s)

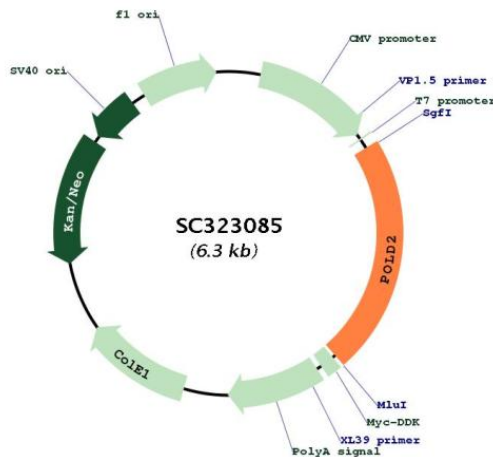
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CAGCAGCACTGGGGCAGTGGAGTGGGAGTGAAGAAGCTGTGTGAAGTGCAGCCTGAGGAGAAGTGTGT
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GACCTGGGAGGCCTGGGGCTGGGCCTGA
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM\_001127218

Insert Size: 1410 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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: [NM\\_001127218.2](#)

RefSeq Size: 1821 bp

RefSeq ORF: 1410 bp

Locus ID: 5425

UniProt ID: [P49005](#)

<b>Cytogenetics:</b>	7p13
<b>Protein Families:</b>	Stem cell - Pluripotency
<b>Protein Pathways:</b>	Base excision repair, DNA replication, Homologous recombination, Metabolic pathways, Mismatch repair, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism
<b>MW:</b>	51.3 kDa
<b>Gene Summary:</b>	<p>This gene encodes the 50-kDa catalytic 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 is required for the stimulation of DNA polymerase delta activity by the processivity cofactor proliferating cell nuclear antigen (PCNA). Expression of this gene may be a marker for ovarian carcinomas. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome 5. [provided by RefSeq, Mar 2012]</p> <p>Transcript Variant: This variant (1) encodes isoform 1. Variants 1 and 3 encode the same isoform.</p>