

## Product datasheet for **SC318222**

### DNA Polymerase iota (POLI) (NM\_007195) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Polymerase iota (POLI) (NM_007195) Human Untagged Clone
Tag:	Tag Free
Symbol:	POLI
Synonyms:	eta2; RAD3OB; RAD30B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

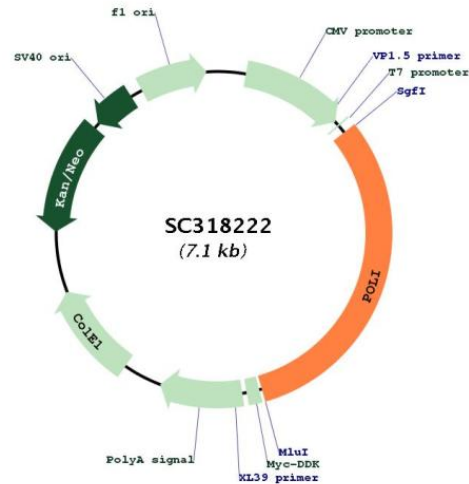


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Fully Sequenced ORF: >SC318222 representing NM\_007195.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGAGAAGCTGGGGGTGGAGCCGGAGGAGGAAGGCGGGCGGACGACGACGAGGAAAGACGCCGAGGCC
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ACACCAAATGCTTCATCCAGAGTCATAGTACATGTGGATCTGGATTGCTTTTATGCAACAAGTAGAAATG
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ATTGGACATAAAATA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_007195

**Insert Size:** 2223 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\\_007195.2](#)

**RefSeq Size:** 6074 bp

**RefSeq ORF:** 2223 bp

**Locus ID:** 11201

**UniProt ID:** [Q9UNA4](#)

**Cytogenetics:** 18q21.2

**Domains:** IMS

**Protein Families:** Druggable Genome

**MW:** 83 kDa

**Gene Summary:** The protein encoded by this gene is an error-prone DNA polymerase involved in DNA repair. The encoded protein promotes DNA synthesis across lesions in the template DNA, which other polymerases cannot do. The encoded polymerase inserts deoxynucleotides across lesions and then relies on DNA polymerase zeta to extend the nascent DNA strand to bypass the lesion. [provided by RefSeq, May 2017]

Transcript Variant: This variant (1) encodes the longest protein [isoform a (long)]. However, this full length (740 aa) form is a minor form. A downstream translation start site is more commonly used, resulting in a 715 aa protein [isoform a (short)]. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.