

## Product datasheet for **RG209566**

### DNA Primase (PRIM2) (NM\_000947) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Primase (PRIM2) (NM_000947) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRIM2
Synonyms:	p58; PRIM2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209566 representing NM\_000947  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAGTTTTCTGGAAGAAAGTGGAGGAAGCTGAGGTTGGCAGGTGACCAGAGGAATGCTTCTACCTC  
 ATTGCCTTCAGTTTTACTTGCAGCCACCTTCTGAAACATATCTTTAATAGAATTTGAAAACCTGGCTAT  
 TGATAGAGTTAAATTGTTAAAATCAGTTGAAAATCTTGGAGTGAGCTATGTGAAAGGAACTGAACAATAC  
 CAGAGTAAGTTGGAGAGTGAGCTTCGGAAGCTCAAGTTTTCTACAGAGAAAACCTAGAAGATGAATATG  
 AACACGAAGAAGAGATCATATTTCTATTTTATTTTTCGGCTTGCTTATTGCCAGTCTGAAGAAGTTAG  
 ACGCTGGTTCATTCAACAAGAAATGGATCTCCTTCGATTTAGATTTAGTATTTTACCAAGGATAAAATT  
 CAGGATTTCTAAAGGATAGCCAATTGCAGTTTGGAGCTATAAGTGATGAAGAGAAGACTCTTCGAGAAC  
 AGGAGATTGTTGCCTCATACCAAGTTTAAAGTGGACTTAAAGTTGGGGTTCGAGTCCATTTATAAGATCCC  
 TTTTGCTGATGCTCTGGATTTGTTTCGAGGAAGGAAAGTCTATTTGGAAGATGGCTTTGCTTACGTACCA  
 CTTAAGGACATTTGGCAATCATCTGAATGAATTTAGAGCCAAACTGTCCAAGGCTTTGGCATTAAACAG  
 CCAGGTCCTTGCCTGCTGTGCAGTCTGATGAAAGACTTCAGCCTCTGCTCAATCACCTCAGTCAATCCTA  
 CACTGGCCAAGATTACAGTACCCAGGAAATGTTGGGAAGATTTCTTTAGATCAGATTGATTTGCTTTCT  
 ACCAAATCCTTCCCACCTTGCATGCGTCAGTTACATAAAGCCTTGCGGGAAAATCACCATCTTCGTCATG  
 GAGGCCGAATGCAGTATGGCCTATTTCTGAAGGCATTGGTTAACTTTGGAACAGGCATTGCAGTTCTG  
 GAAGCAAGAATTTATCAAAGGAAAGATGGATCCAGACAAGTTTGATAAAGGTTACTCTTACAACATCCGT  
 CACAGCTTTGAAAGGAAGGCAAGAGGACAGACTATACACCTTTCAGTTGCCTGAAGATTTCTGTCCA  
 ATCCACCAAGCCAAGGGGATTATCATGGGTGCCCATTCAGTCCAGAGCTGAAGCAAAAA  
 GTTGCAGTCATACAAGATCTCTCCTGGAGGGATAAGCCAGATTTTGGATTTAGTAAAGGGGACACATTAC  
 CAGGTAGCCTGTCAAAAATACTTTGAGATGATACACAATGTGGATGATTGTGGCTTTTCTTTGAATCATC  
 CTAATCAGTTCCTTTGTGAGAGCCAACGTATTCTAAATGGTGGTAAAGACATAAAGAAGGAACCTATCCA  
 ACCAGAAACTCCTCAACCCAAACCAAGTGTCCAGAAAACCAAGGATGCATCATCTGCTCTGGCCTCTTTA  
 AATTCCTCTCTGGAAATGGATATGGAAGGACTAGAAGTACTTTAGTGAAGATTCT

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG209566 representing NM\_000947  
 Red=Cloning site Green=Tags(s)

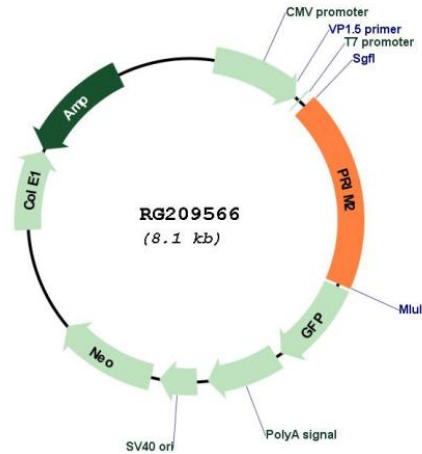
MEFSGRKWRKRLRAGDQRNASYPHCLQFYLPPESENISLIEFENLAIDRVKLLKSVENLGVSYVKGTEQY  
 QSKLESELRKLKFSYRENLEDEYEPRRRDHISHFILRLAYCQSEELRRWF IQQEMDLLRFRFSILPKDKI  
 QDFLKDSQLQFEAISDEEKTREQEIVASSPSLSGLKLFESIYKIPFADALDLFRGRKVVYLEDGFAYVP  
 LKDIVAIIILNEFRAKLSKALALTARSLPAVQSDERLQPLLNHLSHSYTGQDYSTQGNVGIISLDQIDLLS  
 TKSFPPCRQLHKALRENHHLRHGGRMQYGLFLKIGL TLEQALQFWKQEFIKGKMPDKFKDKGYSYNIR  
 HSFGEKGRDYPFSLKIIISNPPSQGDYHGCPFRHSDPELLKQKLQSYKISPGGISQILDLVKGTHY  
 QVACQKYFEMIHNVDDCGFSLNHPNQFFCESQRILNNGGKDIKKEPIQPETPQPKPSVQKTKDASSALASL  
 NSSLEMDMEGLEDYFSEDS

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI



**Plasmid Map:**


**ACCN:** NM\_000947

**ORF Size:** 1527 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](#)

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_000947.5</a>
<b>RefSeq Size:</b>	2353 bp
<b>RefSeq ORF:</b>	1530 bp
<b>Locus ID:</b>	5558
<b>UniProt ID:</b>	<a href="#">P49643</a>
<b>Cytogenetics:</b>	6p11.2
<b>Domains:</b>	DNA_primase_lrg
<b>Protein Pathways:</b>	DNA replication, Metabolic pathways, Purine metabolism, Pyrimidine metabolism
<b>Gene Summary:</b>	This gene encodes the 58 kilodalton subunit of DNA primase, an enzyme that plays a key role in the replication of DNA. The encoded protein forms a heterodimer with a 49 kilodalton subunit. This heterodimer functions as a DNA-directed RNA polymerase to synthesize small RNA primers that are used to create Okazaki fragments on the lagging strand of the DNA. Alternative splicing of this gene results in multiple transcript variants. This gene has a related pseudogene, which is also present on chromosome 6. [provided by RefSeq, Apr 2014]