

Product datasheet for **RC209566**

DNA Primase (PRIM2) (NM_000947) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	DNA Primase
Synonyms:	p58; PRIM2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC209566 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGAGTTTTCTGGAAGAAAGTGGAGGAAGCTGAGGTTGGCAGGTGACCAGAGGAATGCTTCCTACCTC
 ATTGCCTTCAGTTTTACTTGCAGCCACCTTCTGAAAACATATCTTTAATAGAATTTGAAAACCTGGCTAT
 TGATAGAGTTAAATTGTTAAAATCAGTTGAAAATCTTGGAGTGAGCTATGTGAAAGGAAGTGAACAATAC
 CAGAGTAAGTTGGAGAGTGAGCTTCGGAAGCTCAAGTTTTCTACAGAGAAAAGTGAAGATGAATATG
 AACACGAAGAAGAGATCATATTTCTCATTATTTTTCGGCTTGCTTATTGCCAGTCTGAAGAAGTCTAG
 ACGCTGGTTCAACAAGAAATGGATCTCCTTCGATTAGATTTAGTATTTTACCAAGGATAAAAT
 CAGGATTTCTAAAGGATAGCAATTCAGTTTGAGGCTATAAGTGATGAAGAGAAGACTCTCGAGAAC
 AGGAGATTGTTGCCTCATCACCAAGTTTAAAGTGAAGTTTAAAGTGGGGTTCGAGTCCATTTATAAGATCCC
 TTTTGCTGATGCTCTGGATTTGTTTCGAGGAAGGAAAGTCTATTTGGAAGATGGCTTTGCTTACGTACCA
 CTTAAGGACATTGTGGCAATCATCCTGAATGAATTTAGAGCCAAAGTGTCCAAGGCTTTGGCATTAAACAG
 CCAGGTCCTTGCTGCTGTGCAGTCTGATGAAAGACTTCAGCCTCTGCTCAATCACCTCAGTCAATCCTA
 CACTGGCCAAGATTACAGTACCCAGGAAATGTTGGGAAGATTTCTTTAGATCAGATTGATTGTCTTCT
 ACCAAATCCTTCCACCTTGCAATGCGTCAGTTACATAAAGCCTTGCAGGAAAATCACCATCTTCGTCATG
 GAGGCCGAATGCAGTATGGCCTATTTCTGAAGGCAATGGTTTAACTTTGGAACAGGCATTGCAGTTCTG
 GAAGCAAGAATTTATCAAAGGAAAGATGGATCCAGACAAGTTTGATAAAGGTTACTCTTACAACATCCGT
 CACAGCTTTGGAAGGAAGGCAAGAGGACAGACTATACACCTTTCAGTTGCCTGAAGATTATTCTGTCCA
 ATCCACCAAGCAAGGGGATTATCATGGGTGCCATTCCGTACAGTGATCCAGAGCTGCTGAAGCAAAA
 GTTGCAAGTATACAAGATCTCTCCTGGAGGATAAGCCAGATTTTGGATTAGTAAAGGGGACACATTAC
 CAGGTAGCCTGTCAAAAATACTTTGAGATGATACACAATGTGGATGATTGTGGCTTTTCTTTGAATCATC
 CTAATCAGTTCTTTGTGAGAGCAACGTATTCTAAATGGTGGTAAAGACATAAAGAAGGAACCTATCCA
 ACCAGAACTCTCAACCAACCAAGTGTCCAGAAAACCAAGGATGCATCATCTGCTCTGGCCTCTTTA
 AATTCCTCTCTGGAAATGGATATGGAAGGACTAGAAGATTACTTTAGTGAAGATTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209566 protein sequence
 Red=Cloning site Green=Tags(s)

MEFSGRKWRKLRLAGDQRNASYPHCLQFYLPQPSSENISLIEFENLAIDRVKLLKSVENLGVSYVKGTEQY
 QSKLESELRLKFSYRENLEDEYPRRRDHISHFILRLAYCQSEELRRWFIQQEMDLLRFRFSILPKDKI
 QDFLKDSQLQFEAISDEEKTREQEIVASSPSLSGLKLGFEIYKIPFADALDLFRGRKVYLEDGFAYVP
 LKDIVAIILNEFRAKLKALALARSAPVQSDERLQPLLNHLSHSYTGQDYSTQGNVKGISLDQIDLLS
 TKSFPPCMRQLHKALRENHHLRHGGRMQYGLFLKGIGLTLEQALQFWKQEFIKGKMDPKFDKGYSNIR
 HSFGKEGKRDTYTPFSCLKIILSNPPSQGDYHGCPRHSDPELLKQKLQSYKISPGGISQILDLYKGTHY
 QVACQKYFEMIHNVDGCFSLNHPNQFFCESQRIILNGGKDIKKEPIQPETPQPKPSVQKTKDASSALASL
 NSSLEMDMEGLEDYFSEDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

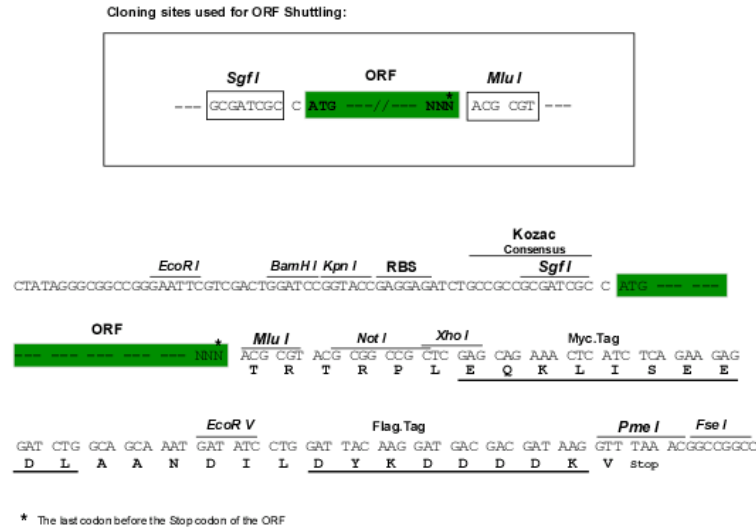
Chromatograms:

https://cdn.origene.com/chromatograms/mk6278_g07.zip

Restriction Sites:

Sgfl-MluI

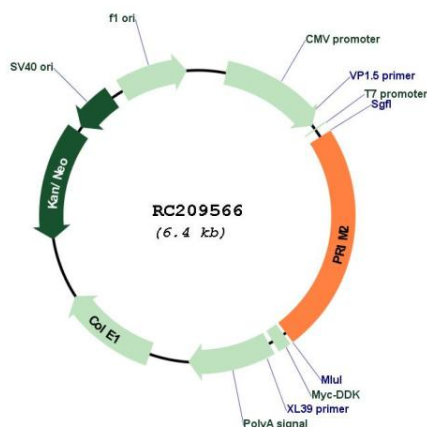
Cloning Scheme:



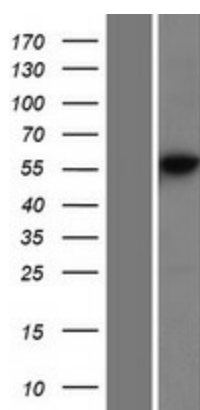
ACCN:	NM_000947
ORF Size:	1527 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000947.5
RefSeq Size:	2322 bp
RefSeq ORF:	1530 bp
Locus ID:	5558

UniProt ID:	P49643
Cytogenetics:	6p11.2
Domains:	DNA_primase_lrg
Protein Pathways:	DNA replication, Metabolic pathways, Purine metabolism, Pyrimidine metabolism
MW:	58.8 kDa
Gene Summary:	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]

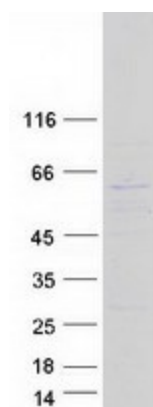
Product images:



Circular map for RC209566



Western blot validation of overexpression lysate (Cat# [LY424442]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209566 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRIM2 protein (Cat# [TP309566]). The protein was produced from HEK293T cells transfected with PRIM2 cDNA clone (Cat# RC209566) using MegaTran 2.0 (Cat# [TT210002]).