

Product datasheet for **SC125450**

DNA Primase (PRIM2) (NM_000947) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Primase (PRIM2) (NM_000947) Human Untagged Clone
Tag:	Tag Free
Symbol:	DNA Primase
Synonyms:	p58; PRIM2A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC125450 sequence for NM_000947 edited (data generated by NextGen Sequencing)

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ATGGAGTTTTCTGGAAGAAAGTGGAGGAAGCTGAGGTTGGCAGGTGACCAGAGGAATGCT
TCCTACCCCTCATTGCCTTCAGTTTTACTTGCAGCCACCTTCTGAAAACATATCTTTAATA
GAATTTGAAAACCTGGCTATTGATAGAGTTAAATTGTTAAAATCAGTTGAAAATCTTGA
GTGAGCTATGTGAAAGGAACTGAACAATACCAGAGTAAGTTGGAGAGTGAGCTTCGGAAG
CTCAAGTTTTCTACAGAGAAAACCTAGAAGATGAATATGAACCACGAAGAAGAGATCAT
ATTTCTCATTTTTATTTTGCGGCTTGCTTATTGCCAGTCTGAAGAAGCTTAGACGCTGGTTC
ATTCAACAAGAAATGGATCTCCTTCGATTTAGATTTAGTATTTTACCCAAGGATAAAAATT
CAGGATTTCTAAAGGATAGCCAATTGCAGTTTGGAGCTATAAGTGATGAAGAGAAGACT
CTTCGAGAACAGGAGATTGTTGCCTCATACCAAGTTTAAAGTGGACTTAAAGTTGGGGTTC
GAGTCCATTTATAAGATCCCTTTTGCTGATGCTCTGGATTTGTTTCGAGGAAGGAAAGTC
TATTTGGAAGATGGCTTTGCTTACGTACCACTTAAAGGACATTGTGGCAATCATCCTGAAT
GAATTTAGAGCCAACTGTCCAAGGCTTTGGCATTAAACAGCCAGGTCCTTGCCTGCTGTG
CAGTCTGATGAAAGACTTCAAGCCTGCTCAATCACCTCAGTCATTCTACACTGGCCAA
GATTACAGTACCCAGGAAATGTTGGGAAGATTTCTTTAGATCAGATTGATTTGCTTTCT
ACCAAATCCTTCCACCTTGATGCGTCAGTTACATAAAGCCTTTCGGGAAAATCACCAT
CTTCGTCATGGAGGCCAATGCAGTATGGCCTATTTCTGAAGGGCATTGGTTAACTTTG
GAACAGGCATTGCAGTTCTGGAAGCAAGAAATTTATCAAAGGAAAGATGGATCCAGACAAG
TTTGATAAAGGTTACTCTTACAACATCCGTCACAGCTTTGGAAAGGAAGGCAAGAGGACA
GACTATACACCTTTCAGTTGCCTGAAGATTATTCTGTCCAATCCACCAAGCCAAGGGGAT
TATCATGGGTGCCATTCGTCACAGTGATCCAGAGCTGCTGAAGCAAAAGTTGCAGTCA
TACAAGATCTCTCTGGAGGGATAAGCCAGATTTTGGATTTAGTAAAGGGGACACATTAC
CAGGTAGCCTGTCAAAAATACTTTGAGATGATACACAATGTGGATGATTGTGGCTTTTCT
TTGAATCATCCTAATCAGTTCTTTTGTGAGAGCCAACGATTCTAAATGGTGGTAAAGAC
ATAAAGAAGGAACCTATCCAACCAGAACTCCTCAACCCAAACCAAGTGTCCAGAAAACC
AAGGATGCATCATCTGCTCTGGCCTCTTTAAATTCCTCTCTGGAATGGATATGGAAGGA
CTAGAAGATTACTTTAGTGAAGATTCTTAG
    
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Clone variation with respect to NM_000947.2

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_000947 unedited
GATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGAACAGTGGC
TGCCACCGTTTGTGTTTTCCCGAGTTTGAATTCCTTGCAGGTGACCAAGATGGAGTTTTCT
GGAAGAAAGTGGAGGAAGCTGAGGTTGGCAGGTGACCAGAGGAATGCTTCTACCCCTCAT
TGCTTTCAGTTTTACTTGCAGCCACCTTCTGAAAACATATCTTTAATAGAATTTGAAAAC
TTGGCTATTGATAGAGTTAAATTGTTAAAATCAGTTGAAAATCTTGGAGTGAGCTATGTG
AAAGGAACTGAACAATACCAGAGTAAGTTGGAGAGTGAGCTTCGGAAGCTCAAGTTTTCC
TACAGAGAAAACCTAGAAGATGAATATGAACCACGAAGAAGAGATCATATTTCTCATTTT
ATTTTGCGGCTTGCTTATTGCCAGTCTGAAGAAGCTTAGACGCTGGTTCATTCAACAAGAA
ATGGATCTCCTTCGATTTAGATTTAGTATTTTACCCAAGGATAAAAATTCAGGATTTCTTA
AAGGATAGCCAATTGCAGTTTGGAGCTATAAGTGATGAAGAGAAGACTCTTCGAGAACAG
GAGATTGTTGCCTCATACCAAGTTTAAAGTGGACTTAAAGTTGGGGTTCGAGTCCATTTAT
AAGATCCCTTTTGTGATGCTCTGGATTTGTTTCGAGGAAGGAAAGTCTATTTGGAAGAT
GGCTTTGCTTACGTACCACTTAAAGGACATTGTGGGCATCATCCTGAATGAATNTAGAGCC
AAACTGTCCAAGGGCTTTGCATTAACAGCCAGTCCTTGCTGCTGTGCAGTCTGATGAA
AGACTCAGCCTCTGCTAATCACCCAGTCATCCTACCTGGCCAGATACAGACCCAGGAAT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_000947 unedited CGGCGATGAGCCTACCCCCCTCACACCCCCGNGGTGGGGTTNTAAACAAATGTCC ANAAAGATGAGTCAAATACAAAGGATAANATTAACAAAGTTGTTCTTTATTGTAGTTT CTGGGGGACTTTAACCAGTCCCCAAAGCTGTTTTATCTCCTAAAATAGGACTTAAATGA CATCACTCAAGTGACAGATTTTAAATAGAACTCCTCCTCTTCTCTGTCAAAGCAAAA TATAGTGAAAGTCTCTGTTGTACCTCAAACCTCTTTCCTAATAAGTGTGCATGCCTGT AGATGGATTGGGATGCAGTGAACAGAGAAGTTAAACAAAAAGGTTAAAAAAAAAAAAAA GGCCAGGCACAGTGGCTACAACCTGTAATCCCAGCACTCTGGGACGCTGAGGTGTGAGGA TCGCTTGAGCCCAGGAGTCTGAGATCTGCCTGGGCAACATAGGGAGACCCCCACCTCTA CAAAAAAAAAATTGAAAAAATTATCTGGATATGAGGTGCACACCTGTGCTCCTAACTACT TGGGAGGCTGACGCCGAGCGATCACCCGATCTGGTAAGGTCAAGGCTGCAATCACTTGT CACTGTGCTACTGCCCTTCTCCTCGCGACATTGAACTCTTTTTAACTATTTAGGCCAA TTCTCCTACCCCGTACCATGTTTTTTTTATGAAAAAGCCTCCTCCACCCCTTTTACCC TCCCCACCCTTCTCTTATTTTTTTTTTCTCTTCCCCACCGTACTTCTATTAGT TTTATCCCCCCTTCTCTTCTTTCTTTCTTTAATCCCCGCCGTGTCTCATCTCCCAT CTCCCTTTTTCGTCTTCCCTTCCCTTTTCCACTGTCCATCAATCCCCCTCTTTTTT TAAACCCCTCCTTCTTCTACTCAACCTCTCCCCCACCCACCCCTCTTCTCCG
Restriction Sites:	NotI-NotI
ACCN:	NM_000947
Insert Size:	2500 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).
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:	<ol style="list-style-type: none"> 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_000947.2 , NP_000938.2
RefSeq Size:	2353 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

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]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (a).