

Product datasheet for **RC202710**

PRIM1 (NM_000946) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRIM1 (NM_000946) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRIM1
Synonyms:	p49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202710 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGACGTTTGACCCACCGAGCTGCCGAGCTGCTTAACTTTATTACCGGAGGCTCTTCCCTACT
CTCAGTACTATCGCTGGCTCACTACGGTGGAGTGATAAAGAATTACTTTCAACACCGTGAATTTTCATT
CACATTGAAAGATGATATTTACATTCGCTACCAATCCTTCAACAACCAGAGTGATCTGGAAAAGGAGATG
CAGAAAAATGAATCCATACAAGATTGATATAGGCGCAGTATATTCTCACAGACCAATCAACACAATACAG
TGAAGCTGGGAGCTTTCCAGGCTCAGGAAAAAGAACTGGTATTTGACATTGACATGACAGACTATGACGA
TGTGAGGAGATGTTGATGTTCTGCAGACATATGTCCTAAGTGCTGGACCCATGACAATGGCCATACGC
ATCATTGACAGAGCATTGAAGGAGGACTTTGGATTTAAGCATCGTCTCTGGGTATATTCTGGAAGGAGAG
GTGTTTATTGTTGGGTCTGTGATGAATCAGTTAGAAAAGTGTCTTCTGCAGTACGTTCTGGGATAGTTGA
GTATTTGAGCCTTGTAAGGGTGGTCAAGACGTTAAAAAGAAAGTTCACCTAAGTGAAAAAATTCACCCCT
TTTATCAGAAAATCTATAAACATAATAAAAAAATACTTTGAAGAATATGCCTTGGTTAATCAAGATATTC
TCGAAAATAAAGAAAGCTGGGATAAGATTTTAGCCCTTGTCTGAAACAATTCATGATGAACCTCAACA
AAGCTTCCAAAAGTCTCACAATTCACCTCAGCGTTGGGAGCACTGAAGAAAGTAGCCAGCAGATATCAG
AATAACATCAAAAATGACAAATATGGACCCTGGCTGGAGTGGGAGATTATGCTCCAGTACTGTTTTCCAC
GGCTGGATATCAATGTCAGCAAAGGAATCAATCATCTACTGAAGAGCCCTTTTATGTTTCATCCTAAAAC
AGGTGCGATATCTGTGCCTATTGATTTGCAGAAAGTGGACCAGTTTGATCCATTTACTGTTCCGACCATA
AGCTTCATCTGCCGTGAATTGGATGCCATTTCCACTAATGAAGAGGAAAAAGAGGAGAATGAAGCTGAAT
CTGATGTCAAACATAGAACCAGAGATTATAAGAAGACCAGTCTAGCACCTTATGTGAAAGTTTTTGAACA
TTTTCTTGAAAATCTGGATAAATCCGAAAAGGAGAACTCTTAAGAAGAGTGATTTACAAAAAGATTTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC202710 protein sequence
Red=Cloning site Green=Tags(s)

METFDPTLPELLKLYRRLFPYSQYRWLNYYGGVIKNYFQHREFSFTLKDDIYIRYQSFNNQSDLEKEM
 QKMNPYKIDIGAVYSHRPNQHTVKLGAFQAQEKLVFDIDMTDYDDVRRCCSSADICPKCWTLMTMAIR
 IIDRALKEDFGFKHRLWVYSGRRGVHCWVCDESVRKLSAVRSGIVEYLSLVKGGQDVKKKVVHLSKIH
 FIRKSINIIKKYFEEYALVNQDILENKESWDKILALVPETIHDELQQSFQKSHNSLQRWEHLKKVASRYQ
 NNIKNDKYGPWLEWEIMLQYCFPRLDINVSKGINHLLKSPFSVHPKTGRISVPIDLQKVDQDFPFTVPTI
 SFICRELDAISTNEEEKEENEAESDVKHRTRDYKKTSLAPYVKVFEHFLENLDKSRKGELLKKSDDLQKDF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6578_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_000946

ORF Size: 1260 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.

RefSeq: [NM_000946.3](#)

RefSeq Size: 1471 bp

RefSeq ORF: 1263 bp

Locus ID: 5557

UniProt ID: [P49642](#)

Cytogenetics: 12q13.3

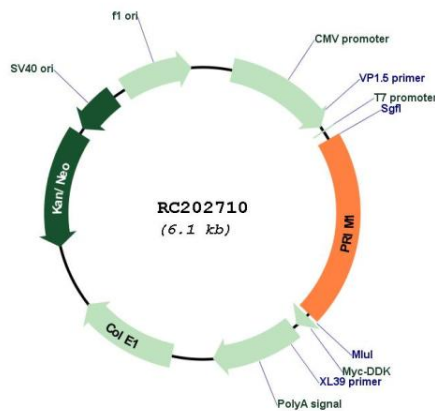
Protein Families: Druggable Genome

Protein Pathways: DNA replication, Metabolic pathways, Purine metabolism, Pyrimidine metabolism

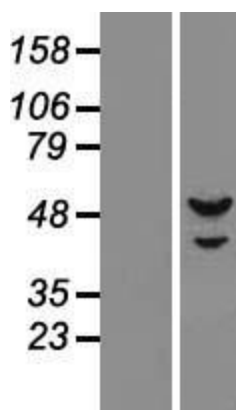
MW: 49.9 kDa

Gene Summary: The replication of DNA in eukaryotic cells is carried out by a complex chromosomal replication apparatus, in which DNA polymerase alpha and primase are two key enzymatic components. Primase, which is a heterodimer of a small subunit and a large subunit, synthesizes small RNA primers for the Okazaki fragments made during discontinuous DNA replication. The protein encoded by this gene is the small, 49 kDa primase subunit. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC202710



Western blot validation of overexpression lysate (Cat# [LY424441]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202710 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).