

Product datasheet for **RC215670**

POLN (NM_181808) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POLN (NM_181808) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POLN
Synonyms:	POL4P
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC215670 representing NM_181808
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAAAATTATGAGGCATTGGTAGGCTTTGATCTCTGTAATACACCGCTCTCCAGTGTTGCTCAGAAGA
 TTATGTCTGCTATGCATTCAAGTATTTAGTGGATTCTAAGACTTGGGAAAGAGTACAGAGACTATGGA
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 AAGGATCTTAAATCTTTAAGAAGTCAGACATCAAGAGGTTCTGCCAAGCTGTCTCCTCAGTCCTTCAAGTG
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 TTTAATCCACAGTATAATCAAGAGGCTTCAGTTCTACAGAAAAAGGGGCATAAAAAGAAAGCATTTCCTA
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 TGGCCATGGCTGTCCAGATGCCCGGCCTGTGGTCTGTCTGGAGGGCTTTGTGTGATGATCCATGC
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 ATTCTTACACATTTATCTGGAGATCCGGAATCTGAAGTATTCCAGGAATCTGAAAGAGATGATGAT
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 GATTCACGCTCATGACCAGCAACTCCGGGCACAAGCAGAGCGACAGGCAGTGAACCTCGTGGTGCAAGGC
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 CCAGCCCCACCCTGCATTTTTGCCTTCATTTTGTCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215670 representing NM_181808
 Red=Cloning site Green=Tags(s)

MENYEALVGFDCNTPLSSVAQKIMSAMHSGDLVDSKTWKGSTETMEVINKSSVKYSVQLEDKRTQSPEK
 KDLKSLRSQTSRGS AKLSPQFSVRLTDQLSADQKQKSISSLTLSSCLIPQYNQEA SVLQKKGHKRKHFL
 MENINNENKGSINLKRKHITYNLSEKTSKQMALEEDTDDAEGYLSNGNSGALKKHFCDIRHLDDWAKSQ
 LIEMLKQAAALVITVMTDGTQLGADQTPVSSVRGIVLVK RQAEGGHGCPDAPACGPVLEGFVSDDDPC
 IYIQIEHSAIWDQEAEHQFARNVLFQTMKCKPVICFNAKDFVRIVLQFFGNDGSKHVADFI GLDPR
 IAAWLIDPSDATPSFEDLVEKYCEKSITVKVNSTYGNSSRNIVNQNVRENKTL YRLTMDLCSKLDYGL
 WQLFRTLELPLIPILAVMESHAIQVNKEEMEKTSALLGARLKELEQEAHFVAGERFLITSNNQLREILFG
 KLKHLHLLSQRNSLPRTGLQKYPSTSEAVLNALRDLHPLPKIILEYRQVHKIKSTFVDGLLACMKKGSISS
 TWNQTGTVTGRLSAKHPNIQGISKHPIQITTPKNFKGKEDKILTISPRAMFVSSKGHTFLAADFSQIELR
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 IQEAAQFLESFLQKYKKIKDFARAAIAQCHQTGCVVSIMGRRRPLPRIHAHQQLRAQAERQAVNFVVQG
 SAADLCKLAMIHVFTAVAASHTLTARLVAQIHDELLFEVEDPQIPECAALVRRRTMESLEQVQALELQLQV
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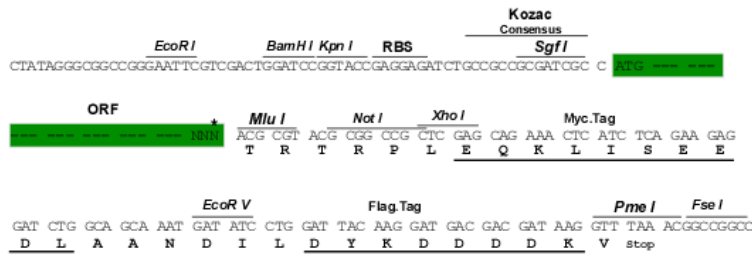
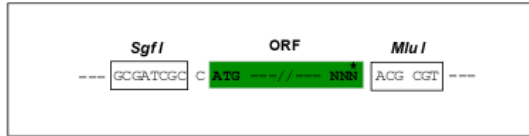
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8028_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

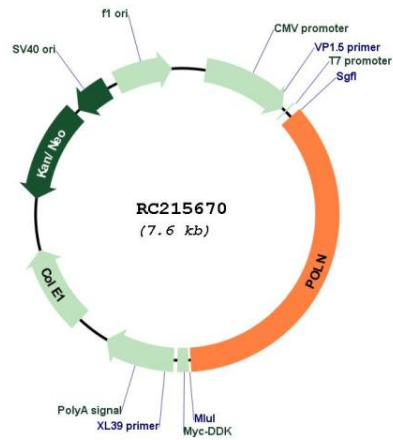


* The last codon before the Stop codon of the ORF

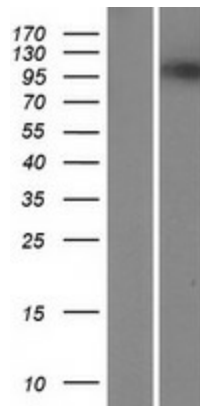
ACCN: NM_181808

ORF Size:	2700 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:	<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_181808.4
RefSeq Size:	2899 bp
RefSeq ORF:	2703 bp
Locus ID:	353497
UniProt ID:	Q7Z5Q5
Cytogenetics:	4p16.3
Protein Families:	Druggable Genome
MW:	100.1 kDa
Gene Summary:	This gene encodes a DNA polymerase type-A family member. The encoded protein plays a role in DNA repair and homologous recombination. This gene shares its 5' exons with some transcripts from overlapping GeneID: 79441, which encodes an augmentin-like protein complex subunit. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RC215670



Western blot validation of overexpression lysate (Cat# [LY405599]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215670 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).