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Product datasheet for SC118517

POLA2 (NM_002689) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POLA2 (NM_002689) Human Untagged Clone
Tag:	Tag Free
Symbol:	POLA2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC118517 sequence for NM_002689 edited (data generated by NextGen Sequencing)

ATGTCCGCATCCGCCCAGCAGCTGGCGGAGGAGCTGCAGATCTTCGGCCTAGACTGCGAG
GAGGCTCTAATTGAGAAATTGGTAGAGCTTTGTGTTCAGTATGGACAGAATGAGGAGGGA
ATGGTAGGCGAGCTTATAGCCTTCTGCACCAGCACACATAAAGTTGGCCTTACCTCAGAG
ATCCTGAACTCTTTTGAGCATGAGTTTCTGAGCAAAAGATTATCGAAAGCCAGGCATAGT
ACCTGCAAGGACAGTGGCCATGCAGGAGCTAGAGACATTGTTTCCATTCAAGAGCTAATT
GAAGTGGAAGAAGAAGAGGAAATCCTCTTGAACTCTTACACCACACCTTCAAAGGGTTCT
CAGAAGCGAGCTATCTCTACCCCAGAAACCCCCCTAACAAAAAGGAGTGTGTCAACTCGT
AGCCCCCATCAGCTACTCTCACCGTCAAGTTTCTCTCCAAGTGCTACTCCCTCCCAGAAA
TACAACTCACGAAGTAACCGAGGAGAAGTGGTTACCTCCTTCGGCTTAGCACAGGGAGTA
TCTTGGTCTGGGAGAGGAGGAGCTGGAAACATCAGCCTGAAGGTCTTGGGATGTCCAGAG
GCACTAACTGGGAGCTACAAATCCATGTTTCAGAAGCTCCCAGACATTCGAGAAGTTCTG
ACCTGTAAGATAGAAGAACTTGGCAGCGAACTCAAGGAACATTACAAGATTGAAGCTTTC
ACTCCTTTGCTAGCCCCAGCACAGGAGCCTGTCACTCTGCTGGGCCAGATTGGCTGTGAT
AGCAACGGGAAGCTGAACAACAAGTCAGTGATTCTCGAGGGAGACCGGGAACATTCCTCG
GGTGCTCAAATTCCAGTGGATTTATCTGAGCTTAAGGAATATTCTCTGTTTCCTGGACAG
GTTGTAATTATGGAAGGAATCAACACCACTGGTAGGAAACTTGTTGCCACCAAACTCTAC
GAGGGTGTGCCACTTCCATTTTATCAGCCCACTGAAGAGGATGCAGACTTTGAGCAAAGC
ATGGTCCTGGTTGCCTGTGGACCATACACCACATCTGACAGCATCACGTATGACCCCCTG
CTTGACCTGATTGCTGTCATCAACCATGACCGGCCAGATGTCTGCATCCTGTTTGGCCCT
TTCCTGGATGCTAAGCATGAACAGGTGGAGAATTGTCTACTGACAAGTCCATTTGAAGAC
ATTTTCAAGCAGTGTCTACGAACAATTATTGAAGGCACAAGAAGCTCCGGCTCCCACCTT
GTCTTTGTCCCGTCATTGAGAGATGTGCACCATGAGCCTGTGTACCCCCAGCCGCCTTTC
AGCTACTCCGATCTGTCTCGAGAGGACAAAAAGCAAGTACAGTTTGTGTCCGAGCCCTGC
AGCCTCTCCATAAACGGAGTGATCTTCGGCTTGACATCCACAGATCTGCTTTTCCACCTG
GGGGCCGAGGAGATCAGTAGTTCTTCCGGAACTTCAGACAGATTCAGCCGAATACTCAAG
CACATCTTGACCCAGAGGAGCTACTACCCACTCTACCCGCCCCAAGAAGACATGGCCATT
GACTATGAGTCGTTCTATGTTTACGCACAGCTGCCTGTCACCCCAGATGTCCTCATCATC
CCGTCAGAGCTGAGGTACTTCGTGAAGGATGTCCTCGGCTGTGTCTGTGTGAACCCTGGG
CGCCTTACCAAAGGGCAGGTGGGAGGCACCTTCGCCCGACTCTACCTTAGGAGGCCGGCA
GCGGACGGGGCAGAGAGGCAGAGCCCATGCATTGCTGTGCAGGTCGTCAGGATCTGA

Clone variation with respect to NM_002689.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002689 unedited

TGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGGCCACTCAGTTCTG
CCACCGTCACTGAGAAGCTCAGCGGTAGCTTTTGGGAAGCAGGACGTTCTCACCAGGAGA
GCGTCCTCTCGAGATTTCTGCTCCCTCCATTCAGGGCGTTTGGGAGCCACCCCTTCATTT
TTTAAAAAAAGTATTTCTCTGTGACCGACGGCCGGGGCCTTCTGACGGTCTGAGGTCTTG
CTTGGGCCAGTCACCTCCTGTCACGGTCCGCGGAGGGGGGAAGGATAAGAGGGCGAGGAG
CTCATCGCTCGCCACCCCCGTGGGCTTCTTGGGCGCAGGTCGGAGCTGGGTGGGCCGGCT
CCCCGGCCCCTGGCTTGGGCGACCATGTCCGCATCCGCCCAGCAGCTGGCGGAGGAGCTG
CAGATCTTCGGCCTAGACTGCGAGGAGGCTCTAATTGAGAAATTGGTAGAGCTTTGTGTT
CAGTATGGACAGAATGAGGAGGGAATGGTAGGCGAGCTTATAGCCTTCTGCACCAGCACA
CATAAAGTTGGCCTTACCTCAGAGATCCTGAACTCTTTTGAGCATGAGTTTCTGAGCAAA
AGATTATCGAAAGCCAGGCATAGTACCTGCAAGGACAGTGGCCATGCAGGAGCTAGAGAC
ATTGTTTCCATTCAAGAGCTAATTGAAGTGGAAGAAGAAGAGGAAATCCTCTTGAACTCT
TACACCACACCTTCAAAGGGTTCTCAGAAGCGAGCTATCTCTACCCCAGAAACCCCCCTA
CAAAAGGAGTGTGTCAACTCGTAGCCCCATCAGCTACTCTCACCGCAAGTTTCTCTCCAG
TGCTACTCCCTCCAGAATACACTCACGAGTACCCGAGAGAAGTGGTTACTNCTTTCGCTA
GC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002689 unedited
GCCGCGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTACACACTCAGAATTTAA
TTTCTCCAAAAGTTGTTTCTGTGTTTGATTCATGTAAAAAATCACAAAGCCTTCTCGCCT
TTTCTGAGTGGGCGGGATCCACAGCTGGCTTACTTCTGGACACGGAGCATGGACTGAGAA
GCAAGAGCTTCCTTCCAGGAGAGGCACCACTCAGAGGCAGGCCCGGCTGCACAAGTCCTC
CCTGCTGGGCCTGGTCACTGCAGCTGCCCCTCCCTGGCTGGCTCCTCTCTCCTTTCCCAC
CCAACTGTTCACCTTGTCACAGGGCTATGTCTTGGCTCTTGGCTAAGACTTTAAGGGCCC
ACACAGCAGAGAACAGCAGAGGACAGAAGCCTCAGATCCTGACGACCTGCACAGCAATGC
ATGGGCTCTGCCTCTCTGCCCCGTCCGCTGCCGGCCTCCTAAGGTAAAGTCGGGCGAAGG
TGCCTCCCACCTGCCCTTTGGTAAGGCGCCCAGGGTTCACACAGACACAGCCGAGGACAT
CCTTCACGAAGTACCTCACCTCTGACGGGATGATGAGGACATCTGGGGTGACAGGCAGCT
GTGCGTAAACCTAGAACCGACTATAGTCAATGGCCATGTCTTCTTGGGGCCCGACACAGT
GGGTAGTAACCTACCTTGGGACAAGAAGCGCCTTGAGTATTCCGGCTGAAATCTGCCCCG
AAGTTCCTGAAAAACCTACTGGATTCACCTCNGGCCCCCACGGGGAAAAAGCAAATCTGG
GGGCCGTNAAGCCCAAAAAACACTCCCGCTTTATGGGAAAGGCTTGACGGTCTCCGACCC
ACACCGTGATCTGGGTTTTTGGGCCCCCCGATACAATACCGTGAACCCTCAAAGGGGCTC
GGGGGGTCCCAGCGCCCCATGTGCCCACTTCTTAATGAACGGAACAAGACAAGGGGGGG

Restriction Sites: NotI-NotI

ACCN: NM_002689

Insert Size: 2560 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:
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_002689.2, NP_002680.2

RefSeq Size: 2514 bp

RefSeq ORF: 1797 bp

Locus ID: 23649

UniProt ID: Q14181

Cytogenetics: 11q13.1

Domains: DNA_pol_alpha_B

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

Gene Summary: May play an essential role at the early stage of chromosomal DNA replication by coupling the polymerase alpha/primase complex to the cellular replication machinery.[UniProtKB/Swiss-Prot Function]