

Product datasheet for RC224742

POLE (NM_006231) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POLE (NM_006231) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POLE
Synonyms:	CRCS12; FILS; IMAGE1; POLE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224742 representing NM_006231 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC224742 representing NM_006231
 Red=Cloning site Green=Tags(s)

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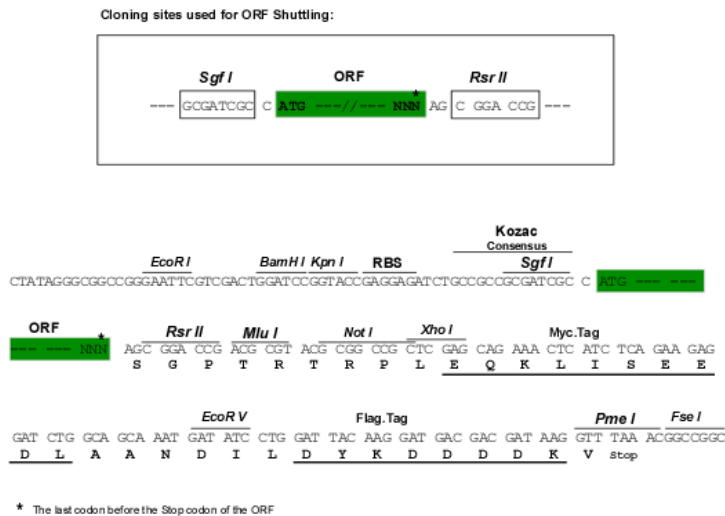
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Chromatograms: https://cdn.origene.com/chromatograms/mk8045_c04.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_006231

ORF Size: 6858 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_006231.4](#)

RefSeq Size: 7859 bp

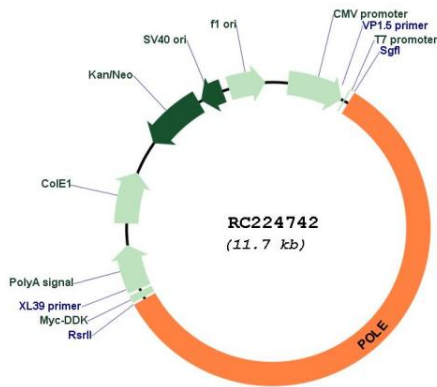
RefSeq ORF: 6861 bp

Locus ID: 5426

UniProt ID: [Q07864](#)

Cytogenetics:	12q24.33
Protein Families:	Druggable Genome
Protein Pathways:	Base excision repair, DNA replication, Metabolic pathways, Nucleotide excision repair, Purine metabolism, Pyrimidine metabolism
MW:	261.3 kDa
Gene Summary:	This gene encodes the catalytic subunit of DNA polymerase epsilon. The enzyme is involved in DNA repair and chromosomal DNA replication. Mutations in this gene have been associated with colorectal cancer 12 and facial dysmorphism, immunodeficiency, livedo, and short stature. [provided by RefSeq, Sep 2013]

Product images:



Circular map for RC224742