

## Product datasheet for MC201373

### Pold4 (NM\_027196) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pold4 (NM_027196) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pold4
Synonyms:	2410012M21Rik; AI463381; AW060307; p12; Polds
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC028520 sequence for NM_027196

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CCATTGCTGGCCCATCTCTCTCTGGCCCCCTCTCTCACTCTCAGCAGCTGTCTCTCACAGGCCCGCTGCC
CTGCCTTTTCTTTGCCTCCTGCTCCGCTGCCTGGGTGGCGCCATGGGTGCGAAGCGGTTCACTACTGA
CTCCTATCCTGTTGTGAAGAAGAGGGAGGGGCCCTGGGCACAGCAAGGGAGAGCTGGCACCCGAGCTA
GGGGAAGACACCCAGTCCCTCAGCCAGGAGGAAACAGAGCTGGAGCTGCTGAGGCAGTTTGACCTGCGCT
GGCAGTATGGGCTTGTACAGGTATCACAAGGCTGCAGCGCTGGAGTCGGGCAGAGCAGATGGGCTTGAA
GCCCCCCTAGAGGTGTACCAAGTGTGAAGGCACACCCTGAAGACCCTCACTTCCAATGCAGCCTGTGG
CATCTCTACCCACTCTGAGGTACCCCACTGTTGCTCTTCTCTGGGCACCTCCTAGCCACCAAGAATTCA
GGACAGACATCATGGCCTGCTCTGCTCATTCCAACCTTGAGAAACAGCAGGCTGACTGTGGAGGTCTTC
CTGGTTCAGTCTTCTCTCATCTAAACAGCAGGCTGCTGAAGCTCCTGGGACCTGTGAAGCTGAGCACCT
CCACGCCCTAATCATGACCACCAGATGCCACCCGCCACACCCCTGACCTACGGTGTGGCAAATCCAGCA
CAGGCTGGCATAAACCAGATGTCGGCAGATAACCTAAAGGGCCACCTTGGGCATCTAGCTGAGGGCACA
GATGAGTGAGTTATTGGATCAAGGAGCTCACTAATGCTTACAATAAAGTACATTAAGCCTGAGAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
  
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Restriction Sites:	EcoRI-NotI
ACCN:	NM_027196
Insert Size:	324 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).


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<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">BC028520</a> , <a href="#">AAH28520</a>
<b>RefSeq Size:</b>	873 bp
<b>RefSeq ORF:</b>	324 bp
<b>Locus ID:</b>	69745
<b>UniProt ID:</b>	<a href="#">Q9CWP8</a>
<b>Cytogenetics:</b>	19 A
<b>Gene Summary:</b>	<p>As a component of the tetrameric DNA polymerase delta complex (Pol-delta4), plays a role in high fidelity genome replication and repair. Within this complex, increases the rate of DNA synthesis and decreases fidelity by regulating POLD1 polymerase and proofreading 3' to 5' exonuclease activity. Pol-delta4 participates in Okazaki fragment processing, through both the short flap pathway, as well as a nick translation system. Under conditions of DNA replication stress, required for the repair of broken replication forks through break-induced replication (BIR), a mechanism that may induce segmental genomic duplications of up to 200 kb. Involved in Pol-delta4 translesion synthesis (TLS) of templates carrying O6-methylguanine or abasic sites. Its degradation in response to DNA damage is required for the inhibition of fork progression and cell survival.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the functional protein.</p>