

Product datasheet for **MC222051**

Polk (NM_012048) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Polk (NM_012048) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Polk
Synonyms:	Dinb1; DINP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC222051 representing NM_012048
 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATAACACAAAGGAAAAGGACAACCTCAAAGACGACCTCCTGCTCCGCATGGGACTAAACGATAACA
 AAGCAGGCATGGAAGGGTTGGATAAGGAGAAAATTAACAAAATTATCATGGAAGCCACAAAGGGTCCAG
 ATTTTATGAAAATGAGCTCAAGAAGGAAAAGCAAGTCAATCAACGGATTGAAAATATGATGCAACAAAA
 GCTCAAATTACCAGCCAGCAACTAAGGAAAGCTCAATTACAGGTTGACAAATTTGCAATGGAGTTAGAAC
 GGAACCGGAATTTGAACAATACCATAGTTCATGTTGACATGGACGCTTTCTATGCAGCTGTGAAAATGAG
 GGACAACCCGGAAGTGAAGGATAAACCCATTGCTGTAGGATCCATGAGCATGTTGGCTACTTCAATTAC
 CATGCAAGGAGGTTTGGTGTCCGTGCAGCCATGCCAGGATTTATTGCTAAGAGGCTCTGCCACAACCTTA
 TTATAGTGCACCAAACTTTGACAAATATAGAGCTGTGAGTAAGGAGGTTAAGGAGATACTTGTGATA
 TGATCCCAATTTTATGGCCATGAGTCTGGACGAAGCCTACTTGAATATAACACAGCACTTGCAAGAAAGG
 CAAGATTGGCCTGAGGACAAAAGAAGATACTTCATCAAGATGGGAAACTACTTAAAAATCGACACACCCA
 GACAGGAAGCTAACGAGCTGACTGAGTATGAGCGGTCCATCTCCCGCTGCTTTTTGAAGATAGTCTCC
 TGATTTGCAACCCCAAGGAAGTCTTTCCAACCTGAACTCTGAAGAACAAAAAATCTCAATAGCCCAA
 AATTCAAGTTGTTTTGGAACATCAGCTGAGGAAGTGGTAAAGGAAATTCGCTTCAGAATTGAACAAAA
 CAACGCTGACAGCCAGCGCAGGCATCGCCCCAATACAATGTTAGCAAAAGTGTGCAAGTATAAGAAATA
 GCCAAACGGACAGTACCAGATCCTTCCCAGCAGGAGCGCGGTGATGGACTTCATCAAGGACCTGCCTATT
 AGAAAGGTTTCTGGGATAGGAAAAGTTACAGAAAAATGTTAATGGCTCTCGGGATTGTTACTTGACAG
 AACTCTACCAACAGAGAGCGTTGCT
 CCGCTGGGTCTAGGTTCAACAGACCTGGCAAGGGATGGAGAAAAGGAAAGCATGAGTGTGAAAAGGACA
 TTCAGTGAGATAAGTAAGACAGAGGAACAGTACAGCCTGTGCCAAGAACTGTGCGCTGAGCTCGCCACG
 ACCTCCAGAAGGAAGGACTTAAGGGAAGAACCCTCACCATTAAGCTGAAGAACGTGAATTTGAAGTAAA
 AACTCGTGATCTACCGTCCGGCCGCAATTTCTACTGCAGAGGAAATATTTGCCATTGCCAAGGAGCTG
 CTAAGGACAGAAGTTAATGTGGTTCTCCACACCCCTGCGGTTAAGACTGATGGGTGTCCGAATGTCTA
 CTTTTCCAGTGAAGATGACAGGAAACCAACAAAGGAGCATCATTGGTTTCTACAAGCTGGAAACCA
 AGCTTTGTCTACTGGGATAGTCTAGACAAAAGTACAAAAGTACTGAGCTTGAAGGCCCTTAGAAATG
 TCTCATAAGAAGGTTTCTTTGATAAAAAGCGATCAGAAAAGTCTCAACTGTCAAGACACATCCAGAT
 GTAAAAGTGCAGGTCAGCAAGCTTTACAGATCTTGAACCATCCCAAGCATTAAAGAAGCTGAGCGAGAG
 TTTTGAACATCAGAGAATTCAAATGACTGTGACAGATTTATATGTCCAGTTTGCTTTAGGGAGCAAGAA
 GGTGTCAGTCTGGAAGCCTTAAATGAACATGTAGATGAGTGTCTTGATGGACCGTCAACCAGTGAGAACT
 CAAAAATCCTGTTACTCACATGCTTCTCTGACAGATTGGTCAAGGAAGATGTACACCCCTCTAT
 TCCACTGTGTGAGAAACGGGGCATGAAAATGGAGAGATCACTTTAGTAGATGGTGTAGATCTAACAGGG
 ACGGAAGACAGATCATTGAAAGCAGCAAGGATGGACACTTAGAGAATAATCGCAGCAAAGAGGAATGTC
 CTGATATCCAGACAAGTCTTGCCTATATCACTGGAAAATGAAACCATCAGTACATTAAGTAGGCAAGA
 CTCTGTCCAGCCTTGTACAGATGAGGTAGTAACAGGACGAGCTCTAGTGTCTGTTTGTAACTAGAA
 CAAGAGACTTCTGATCTTACCCTTTCAACATACATGTGGATATTTGCTTAAATAAAGGTATTATCCAAG
 AACTGAGAAATAGTGAAGTAATTCAGTTAAACACCCAAAGAAAGCTCGAGAAGTACTGACAGACTTCA
 GAAGGCTTCAGGAAGGACCAAAAGGCCAGGAACGAAGACAAGAGCTCAACTTTGAAGAAAACAAAGCCC
 CGAGATCCAGACACACCCTTGATGGATTTTTTAAATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1575_a02.zip

Restriction Sites: SgfI-MluI

ACCN: NM_012048

Insert Size:	2559 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:	<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:	<u>NM_012048.2</u> , <u>NP_036178.1</u>
RefSeq Size:	4226 bp
RefSeq ORF:	2559 bp
Locus ID:	27015
UniProt ID:	<u>Q9QUG2</u>
Cytogenetics:	13 D1
Gene Summary:	<p>DNA polymerase specifically involved in DNA repair. Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls (PubMed:12432099). Depending on the context, it inserts the correct base, but causes frequent base transitions, transversions and frameshifts. Lacks 3'-5' proofreading exonuclease activity. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but does not have lyase activity (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (a) represents the longest transcript and encodes the longest isoform (a).</p>