

## Product datasheet for **MR210382**

### Polk (BC052820) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Polk (BC052820) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Polk
Synonyms:	Dinb1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MR210382 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGATAACACAAAGGAAAAGGACAACCTCAAAGACGACCTCCTGCTCCGCATGGGACTAAACGATAACA  
 AAGCAGGCATGGAAGGGTTGGATAAGGAGAAAATTAACAAAATTATCATGGAAGCCACAAAGGGTCCAG  
 ATTTTATGAATATGATCCCAATTTTATGGCCATGAGTCTGGACGAAGCCTACTTGAATATAACACAGCAC  
 TTGCAGGAAAGGCAAGATTGGCCTGAGGACAAAAGAAGATACTTCATCAAATGGGAACTACTTAAAAA  
 TCGACACACCCAGACAGGAAGCTAACGAGCTGACTGAGTATGAGCGGTCCATCTCCCGCTGCTTTTTGA  
 AGATAGTCTCTGATTTGCAACCCCAAGGAAGTCTTTCCAACCTGAACCTCTGAAGAACAAAACAATCCT  
 CAAATAGCCCAAATTCAGTTGTTTTGGAACATCAGCTGAGGAAGTGGTAAAGGAAATTCGCTTCAGAA  
 TTGAACAAAAACAACGCTGACAGCCAGCGCAGGCATCGCCCCAATACAATGTTAGCAAAGTGTGCAG  
 TGATAAGAATAAGCCAAACGGACAGTACCAGATCCTTCCAGCAGGAGCGGGTGTGGACTTCATCAAG  
 GACCTGCCTATTAGAAAGTTTCTGGGATAGGAAAAGTTACAGAGAAAATGTTAATGGCTCTCGGGATTG  
 TTACTTGACAGAACTCTACCAACAGAGAGCGTTGCTGTCTCTCTTTTCTCTGAAACCTCTTGGCATTA  
 TTTTCTTCACATCGCGCTGGGTCTAGGTTCAACAGACCTGGCAAGGGATGGAGAAAGGAAAAGCATGAGT  
 GTTGAAAGGACATTCACTGAGATAAGTAAGACAGAGGAACAGTACAGCCTGTGCCAAGAACTGTGCGCTG  
 AGCTCGCCACGACCTCCAGAAGGAAGGACTTAAGGGAAGAACCCTCACCATTAGCTGAAGAACGTGAA  
 TTTTGAAGTAAAACTCGTGCATCTACCGTTCCGGCCGCATTTCTACTGCAGAGGAAATATTTGCCATT  
 GCCAAGGAGCTGCTAAGGACAGAAGTAAATGTGGTCTCCACACCCCTGCGGTTAAGACTGATGGGTG  
 TCCGAATGTCTACTTTTTCCAGTGAAGTACAGGAAACCAACAAAGGAGCATATTGGTTTCTTACA  
 AGCTGGAACCAAGCTTTGTCATCTACTGGGGTAGTCTAGACAAAACCTGCCAAAACCTGAGCTTGCAAAG  
 CCCTTAGAAATGTCTATAAGAAGATTTCTTTGATAAAAAGCGATCAGAAAGAATCTCCAACCTGCAAG  
 ACACATCCAGATGTAACACTGCGGGTACGAAGCTTTACAGATCTTGAACCATCCCAAGCATTAAAGAA  
 GCTGAGCCAGAGTTTTGAAACATCAGAGAATTCAAATGACTGTCAGACATTTATATGTCCAGTTTCTTT  
 AGGGAGCAAGAAGGTGTCAGTCTGGAAGCCTTAAATGAACATGTAGATGAGTGTCTTGATGGACCGTCAA  
 CCAGTGAAGACTCAAAAATATCCTGTTACTCACATGCTTCTCTGCAGACATTGGTCAGAAGGAAGATGT  
 ACACCCCTCTATCCACTGTGTGAGAAACGGGGCATGAAAATGGAGAGATCACTTCAGTAGATGGTGTA  
 GATCTAACAGGGACGGAAGACAGATCATTGAAAGCAGCAAGTATGGACACTCTAGAGAATAATCGCAGCA  
 AAGAGGAATGTCTGATATTCCAGACAAGTCTTGTCTATATCACTGGCAAATGAAACCATCAGTACATT  
 AAGTAGGCAAGAATCTGTCCAGCCTGTACAGATGAGGTAGTAACAGGACGAGCTCTAGTGTGCTCTGTT  
 TGTAACCTAGAACAAAGAGACTTCTGATCTTACCCTCTTCAACATACATGTGGATATTTGCTTAAATAAG  
 GTATTATCCAAGAAGTGAAGAAAGTGAAGGTAATTCAGTTAAACAACCCAAAGAAAGCTCGAGAAGTAC  
 TGACAGACTTCAGAAGGCTTCAGGAAGGACAAAAGGCCACGTGGAGCAACCTCACCATCAGTCTCTCCA  
 TGCTTAGCCACCATGGTACCATTGATGCTTCCGTACCTACCTGTGTGCATCTCTGTGCTGTGAGCAGA  
 TGCAGTTAGAATTGGCCATGATGTCCATGAAGAACATTAGCTTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR210382 protein sequence  
Red=Cloning site Green=Tags(s)

```

MDNTKEKDNFKDDLRLMGLNDNKAGMEGLDKEKINKIIMEATKGSRFYEYDPNFMAMSLDEAYLNITQH
LQERQDWPEDKRRYFIKMGNYLKIDTPRQEANELTEYERSISPLLFEPSPPDLQPQGGPQLNSEEQNNP
QIAQNSVVFGTSAEEVVKIEIRFRIEQKTLTASAGIAPNTMLAKVCSKDKNPNQYQILPSRSVMDFIK
DLPIRKVSGIGKVTCKMLMALGIVTCTELYQQRALLSLLFSETSWHYFLHIALGLGSTDLDLARDGERKSMS
VERTFSEISKTEEQYSLCQELCAELADLQKEGLKGRVTIKLKNVNFVKTRASTVPAIISTAEEIFAI
AKELLRTEVNVGSPHPLRLRLMGVVMSTFSSDDRKHQQRSIIIGFLQAGNQALSSSTGGSLDKTAKTELAK
PLEMSHKKSFFDKKRSEISNCQDTSRCKTAGQQALQILEPSQALKKLSQSFETSENSNDQTFICPVCF
REQEGVSLAEFNEHVDECLDGPSTSENSKISCYSHASSADIGQKEDVHPSIPLCEKRGHENGEITSVDGV
DLTGTEDRSLKAASMDTLENNRSKEECPDIPDKSCPISLANETISTLSRQESVQPCTDEVVTGRALVCPV
CNLEQETSDLTLFNIHVDICLNKGI IQELRNSEGNSVKQPKESSRSTDRLQKASGRTRKPRGATSPSAPP
CLATMVPLMLPYLPVCISVSCEQMQLLAMMSMKNISLT
    
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** BC052820

**ORF Size:** 2217 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:** [BC052820](#), [AAH52820](#)

**RefSeq Size:** 3517 bp

**RefSeq ORF:** 2219 bp

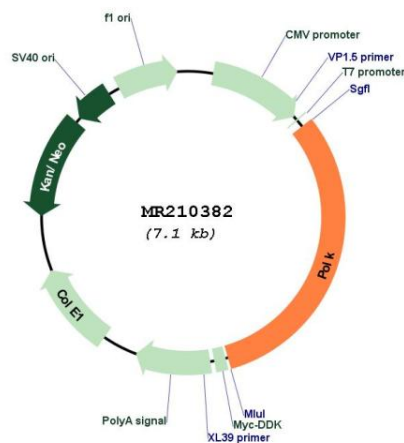
**Locus ID:** 27015

**Cytogenetics:** 13 D1

**MW:** 82.4 kDa

**Gene Summary:** 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]

### Product images:



Circular map for MR210382