

## Product datasheet for **MR218857**

### Polk (NM\_012048) Mouse Tagged ORF Clone

#### Product data:

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



[View online »](#)

ORF Nucleotide  
Sequence:

>MR218857 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGATAACACAAAGGAAAAGGACAACCTCAAAGACGACCTCCTGCTCCGCATGGGACTAAACGATAACA  
AAGCAGGCATGGAAGGGTTGGATAAGGAGAAAATTAACAAAATTATCATGGAAGCCACAAAGGGTCCAG  
ATTTTATGAAAATGAGCTCAAGAAGGAAAAGCAAGTCAATCAACGGATTGAAAATATGATGCAACAAAA  
GCTCAAATTACCAGCCAGCAACTAAGGAAAGCTCAATTACAGGTTGACAAATTTGCAATGGAGTTAGAAC  
GGAACCGGAATTTGAACAATACCATAGTTCATGTTGACATGGACGCTTTCTATGCAGCTGTGAAAATGAG  
GGACAACCCGGAAGTGAAGGATAAACCCATTGCTGTAGGATCCATGAGCATGTTGGCTACTTCAATTAC  
CATGCAAGGAGGTTTGGTGTCCGTGCAGCCATGCCAGGATTTATTGCTAAGAGGCTCTGCCACAACCTTA  
TTATAGTGCCCCAAACTTTGACAAATATAGAGCTGTGAGTAAGGAGGTTAAGGAGATACTTGTGTAATA  
TGATCCCAATTTTATGGCCATGAGTCTGGACGAAGCCTACTTGAATATAACACAGCACTTGCAAGAAAGG  
CAAGATTGGCCTGAGGACAAAAGAAGATACTTCATCAAGATGGGAAACTACTTAAAAATCGACACACCCA  
GACAGGAAGCTAACGAGCTGACTGAGTATGAGCGGTCCATCTCCCGCTGCTTTTTGAAGATAGTCTCC  
TGATTTGCAACCCCAAGGAAGTCTTTCCAACCTGAACTCTGAAGAACAAAACAATCTCAATAGCCCAA  
AATTCAAGTTGTTTTGGAACATCAGCTGAGGAAGTGGTAAAGGAAATTCGCTTCAGAATTGAACAAAA  
CAACGCTGACAGCCAGCGCAGGCATCGCCCCAATAACAATGTTAGCAAAAGTGTGCAAGTATAAGAAATA  
GCCAAACGGACAGTACCAGATCCTTCCCAGCAGGAGCGCGGTGATGGACTTCATCAAGGACCTGCCTATT  
AGAAAGGTTTCTGGGATAGGAAAAGTTACAGAAAAATGTTAATGGCTCTCGGGATTGTTACTTGACACAG  
AAGTCTACCAACAGAGAGCGTTGCTGCTCTCTCTTTTCTGAAACCTCTTGGCATTATTTTCTTACAT  
CGCGCTGGGTCTAGGTTCAACAGACCTGGCAAGGGATGGAGAAAAGGAAAGCATGAGTGTGAAAGGACA  
TTCAGTGAGATAAGTAAGACAGAGGAACAGTACAGCCTGTGCCAAGAACTGTGCGCTGAGCTCGCCACG  
ACCTCCAGAAGGAAGGACTTAAGGGAAGAACCCTCACCATTAAGCTGAAGAACGTGAATTTGAAGTAAA  
AACTCGTGACATCTACCGTCCGGCCGCAATTTCTACTGCAGAGGAAATATTTGCCATTGCCAAGGAGCTG  
CTAAGGACAGAAGTTAATGTGGTTCTCCACACCCCTGCGGTTAAGACTGATGGGTGTCGGAATGTCTA  
CTTTTTCCAGTGAAGATGACAGGAAACCAACAAAGGAGCATCATTGGTTTCTACAAGCTGGAAACCA  
AGCTTTGTACTACTGGGATAGTCTAGACAAAAGTACAAAAGTACTGAGCTTGAAGGCCCTTAGAAATG  
TCTCATAAGAAGGTTTCTTTGATAAAAAGCGATCAGAAAAGTCTCAACTGTCAAGACACATCCAGAT  
GTAAAAGTGGCGGTGAGCAAGCTTTACAGATCTTGAACCATCCCAAGCATTAAAGAAGCTGAGCGAGAG  
TTTTGAAACATCAGAGAATTCAAATGACTGTGACAGATTTATATGTCCAGTTTGCTTTAGGGAGCAAGAA  
GGTGTGACTGGAAGCCTTAAATGAACATGTAGATGAGTGTCTTGATGGACCGTCAACCAGTGAGAACT  
CAAAAATATCCTGTTACTCACATGCTTCTCTGCAGACATTGGTCAAGGAAGATGTACACCCCTCTAT  
TCCACTGTGTGAGAAACGGGGCATGAAAATGGAGAGATCACTTTAGTAGATGGTGTAGATCTAACAGGG  
ACGGAAGACAGATCATTGAAAGCAGCAAGGATGGACACTCTAGAGAATAATCGCAGCAAAGAGGAATGTC  
CTGATATCCAGACAAGTCTTGCCTATATCACTGGAAAATGAAACCATCAGTACATTAAGTAGGCAAGA  
CTCTGTCCAGCCTTGTACAGATGAGGTAGTAACAGGACGAGCTCTAGTGTCTGTTTGTAACTAGAA  
CAAGAGACTTCTGATCTTACCCTTTCAACATACATGTGGATATTTGCTTAAATAAAGGTATTATCCAAG  
AACTGAGAAATAGTGAAGTAATTCAGTTAAACAACCCAAAGAAAGCTCGAGAAGTACTGACAGACTTCA  
GAAGGCTTCAGGAAGGACCAAAAGGCCAGGAACGAAGACAAGAGCTCAACTTTGAAGAAAAACAAGGCC  
CGAGATCCAGACACACCCTTGATGGATTTTTTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR218857 protein sequence  
 Red=Cloning site Green=Tags(s)

MDNTKEKDNFKDDL LRMGLNDNKAGMEGLDKEKINKIIMEATKGSRFYGNELKKEKQVNQRIENMMQOK  
 AQITSQQLRKAQLQVDKFAMELERNRNLNNTIVHVDMAFYAAVEMRDNPELKDKPIAVGSMMLATSNY  
 HARRFGVRAAMPGFIAKRLCPQLIIVPPNFDKYRAVSKEVKEILAEYDPNFMAMSLDEAYLNITQHLQER  
 QDWPEDKRRYFIKMGNYLKIDTPRQEANELTEYERSISPLLFEDSPPDLQPQGSPPQLNSEEQNNPQIAQ  
 NSVVFGTSAEEVVKEIRFRIEQKTTLTASAGIAPNTMLAKVCSDKNKNPQYQILPSRSVMDFIKDLPI  
 RKVSGIGKVTEKMLMALGIVTCTELYQQRALLSLLFSETSWHYFLHIALGLGSTD LARDGERKSMSVERT  
 FSEISKTEEQYSLCQELCAELAHDLQKEGLKGRVTIKLKNVNFVKTASTVPAAIATAEEIFAIKEL  
 LRTEVNVGSPHPLRLRLMGVRMSTFSSDDRKHQQRSIIGFLQAGNQALSSTGDSLDKTDKTELAKPLEM  
 SHKKSFFDKKRSEISNCQDTSRCKTAGQALQILEPSQALKKLSSEFETSENSNDQTFICPVCFREQE  
 GVSLEAFNEHVDECLDGPSTSENSKISCYSHASSADIGQKEDVHPSIPLCEKRGHENGEITLVDGDLTG  
 TEDRSLKAARMDTLENNRSKEECPDIPDKSCPI SLENETISTLSRQDSVQPCTDEVVTGRALVCPVCNLE  
 QETSDLTLFNIHVDI CLNKGIIQELRNSEGN SVKQPKESSRSTDR LQKASGRTRKPGTKKSSTLKKTKP  
 RDPRH TL DGF FK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

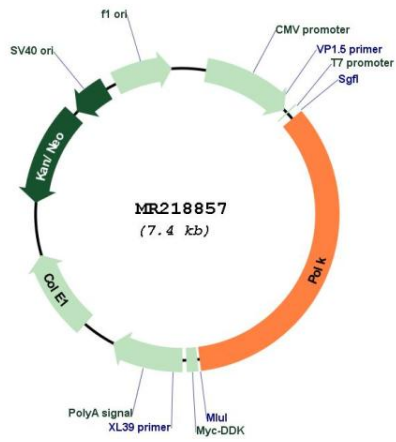
SgfI-MluI

Cloning Scheme:



<b>ACCN:</b>	NM_012048
<b>ORF Size:</b>	2556 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<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>RefSeq:</b>	<a href="#">NM_012048.3</a>
<b>RefSeq Size:</b>	4226 bp
<b>RefSeq ORF:</b>	2559 bp
<b>Locus ID:</b>	27015
<b>UniProt ID:</b>	<a href="#">Q9QUG2</a>
<b>Cytogenetics:</b>	13 D1
<b>MW:</b>	96 kDa
<b>Gene Summary:</b>	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 MR218857