

## Product datasheet for **RR210723**

### **Dok1 (NM\_001025416) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dok1 (NM_001025416) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dok1
Synonyms:	Dok-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RR210723 representing NM\_001025416  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGACGGGGCTTTGATGGAGGGTCCGCTTTTTCTGCAGAGTCAGCGCTTCGGGACCAAGAGGTGGAAGA  
 AAACCTGGGCTGTGCTTTACCCAGCCAGCCCTCACGGCGTGGCGGGCTGGAATTTTGTATCACAAGGG  
 GTCGAGCTCTGGAGGGGTCGAGGCGGCTCTCGCCGTCTAGACTGCAAGATGATACGCTGGCTGAATGT  
 GTGAGCGTGGTGCCTGTGACTGTGGAGAGTCCCCCTGAGCCCGCGCCTCTGCCTCCGCTGGACACCG  
 CACAACGCTCGCACCTGCTTGCAGCGGACGCCGATCCAGCACTGCCTGGGTGCAGATTTTATGCAGAAC  
 CGCTTTCCGAAAGGCGGCTGGGCTTTGGCTCAGACGGAGAACCACCTAAGTTTTCTGCCCTGGAGATG  
 CTGGAGAATTCGCTGTACAGCCCACCTGGGAAGGATCCCAATTCGGTAACCTCGAGAAGACCGAGG  
 CTTCTGAACGCTCGGCTTGCAAGGCTCCTACGTACTGAGGTAAGCTGAGAAGCTGACCCTTCTGAC  
 TTTGGGTGCAGAGTCAAATCCTGGAGCCGCTCTTTTCTGGCCCTACACTCTGTGCGACGCTATGGC  
 CGAGACAAGTAATGTTCTCCTTTGAAGCGGGTCGCCGCTGCCCTCTGGCCCTGGGACCTTCACCTTC  
 AGACTGCCAGGAAATGACATCTTTCAGGCAGTTGAGGCTGCTATCCAGCAGCAGAAAGCCCAAGGAAA  
 GGTGGGACAGGACAAGATATCACCAGAAGTACTCCCATGATGGGGAGACAGAGGGGAAGATGGCTCCC  
 ACTCCTGTTCCCAAGAACCCCTGGGCAGCCCTCCAGCCCTATATGCAGAGCCTTTAGACTCCCTGCGAA  
 TTCCTCCAGGCCCTTCTCAGGACTCTTTGATTCAGACCCCTGGGCAGCACCCCTGCTGGGGCAGGGGA  
 AGGGGTGCAGCGGAAGAAACCTCTCTATTGGGATTTGTATGGGCAGTGCAGCAGCAGTTGCTGAAAACC  
 AAGCTGATAGACTCCAAGAGGACCCATCTATGATGAGCCTGAGGGCTGGCCCTGCCCTCTCCGGG  
 GCCTTTATGATCGCTCAGGACCTAAGGATGCATGGTGGTGCCAGGCTCGGCTGAAGGAAGAGGGCTA  
 TGAGTCCCTTACAACCCCGCCACCGACGACTACGCTGTGCCACCCCTCGGAGCTCAAAGCCTACCCCT  
 GCCCCAAGCCACAGGGCTTGATCCTTCTGAATCTGGTACCACAGCTGGCAGTGGCAGCAAAGGCTCAG  
 ATACAGCTCTGTACAGCCAGGTCCAGAAAAGTGGGACCCAGGGAGATGGGACTGTGGACTCTAGAGT  
 AGGGAATGACAGGGTGGGGTCAAGTCAGAGGGTCCACC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR210723 representing NM\_001025416  
 Red=Cloning site Green=Tags(s)

MDGALMEGPLFLQSQRFGTKRWKKTWAVLYPASPVGVARLEFFDHKGSSSSGGGRGSRRLDCKMIRLAEC  
 VSVVPVTVESPPPEPGASAFRLDTAQRSHLLAADAASSTAWVQILCRTAFPKGGWALAQTENPPKFSALEM  
 LENSLSYPTWEGSQFWVTSQKTEASERCGLQGSYVLRVEAEKLTLLTLGAQSQILEPLLFWPYTLRRYG  
 RDKVMFSFEAGRRCPSGPGTFTFQTAQGNDFQAVEAAIQQKAQKVGQGDITRDTSDHGETEGKMAP  
 TPVPQEPLGSPPALYAEPLDSLRIPPGPSQDSL YSDPLGSTPAGAGEGVQRKKPLYWDL YGHVQQQLLKT  
 KLIDSKEDPIYDEPEGLAPAPLRGLYDLPQEPKDAWWCQARLKEEGYELPYNPATDDYAVPPRSSKPTP  
 APKPQGLILPESGTTAGSGSKGSDTALYSQVQKSGTPGRWDCGLSRVGNDRVGVKSEGST

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

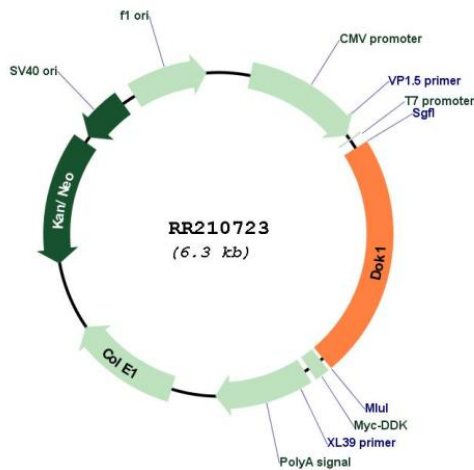
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001025416

ORF Size: 1440 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).

<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>	<u>NM_001025416.1, NP_001020587.1</u>
<b>RefSeq Size:</b>	1757 bp
<b>RefSeq ORF:</b>	1443 bp
<b>Locus ID:</b>	312477
<b>UniProt ID:</b>	<u>Q4QQV2</u>
<b>Cytogenetics:</b>	4q34
<b>MW:</b>	52.2 kDa
<b>Gene Summary:</b>	DOK proteins are enzymatically inert adaptor or scaffolding proteins. They provide a docking platform for the assembly of multimolecular signaling complexes. DOK1 appears to be a negative regulator of the insulin signaling pathway. Modulates integrin activation by competing with talin for the same binding site on ITGB3 (By similarity).[UniProtKB/Swiss-Prot Function]