

## Product datasheet for **MR230651**

### **Prc1 (NM\_001285997) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Prc1 (NM_001285997) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prc1
Synonyms:	D7Ertd348e
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>MR230651 representing NM\_001285997  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGGAGAAGTGAAGTCTAGCAGATGAGTCTATCACATGCCTGCAGAAAGCTCTAACTCACCTCCGGG  
 AAATATGGGAACAAATTGGGATTCCAGAGGAGCAGAGGCTACAAAGAACCAGGTTGTAAAGAAGCATAT  
 AAAGGATCTTCTGGATAGAATGATTGCTGAAGAGGAGAGCCTGAGGAAAAGGCTGCTCAAAAAGCATATCC  
 ATCTGTGAGAAGGAGCTGAGTACCCTGTGCAGTGAAGTACAAGTGAAGCCATTTAGGAAGAAAAAGATA  
 CAACCATCTTGAACCTAGAAAAAGATTTGCGCACTCAAGTAGAATTGATGAGAAAACAGAAAAAGGAGAG  
 AAAGCAGGAACCTGAAGCTACTTCAGGAACAGGAGCAAGAAGTCCGTGACATCCTCTGTATGCCGCCCTGT  
 GATGTGGACAGCACCTCTGTCCCACCTTAGAAGAGCTGAAGCTATTCCGACAGCGTGTGGCAACGCTGA  
 GGGAGACAAAAGGAATCGAGGCGTGAAGAATTTGTCAACATTAAGAAACAAATCATATTGTGTATGGAAGA  
 ATTAGAACACTCTCCAGATACAAGCTTTGAAAGAGATGTGGTGTGTGAAGATGAAAGTGCTTTTTGTTTA  
 TCACTGGAGAACATTGCAACATTACAGAAGTTGCTGAAGCAGCTGAAATGAAAAATCACAAAATGAAG  
 CAGAATGTGAGGGGCTCCGCACTCAAATCCGAGAGCTCTGGGATAGGTTACAAATACCTGAAGAAGAGAG  
 AGAGCCTGTGGAGCAATTATGACTGGATCAAAAACAAAATCAGGAATGCGCTGAAATAGAAAGTGGAT  
 CGGTTAGAAGAACTGAAAATGCAAAACATAAAGCAAGTATTGAGAAAATCCGAGTGGAGCTGGCTCAAT  
 TCTGGGACCAGTGTTTTTATAGCCAGGAACAGAGGCGAGCTTTTGCCCTTACTATTCTGAGGACTACAC  
 AGAAAACCTGCTCCATCTTCATGATGCCGAGATTGTACGGTTAAGAACTACTATGACGTTACAAAGGAG  
 CTGTTCCAAGGCGTCCAGAAGTGGGAAGAGAGCTGGAAACTTTTCTAGAGTTTGAGAGAAAAGCTTCAG  
 ATCCAGTTCGATTTACAAACCGAGGGGAAATCTTTTAAAAGAAGAAAAGGAACGAGCAAAAGCTCCAGAA  
 AACACTCCCTAAGCTGGAAGAGGAGTTGAAAGCACGGATTGAACAGTGGGAACAGGAGCACTCAACAGCA  
 TTTGTGGTGAATGGGCAGAAATTCATGGAGTATGTTACAGAACAGTGGGAATTACATCGGCTGGAGAAAG  
 AGCGAGCCAAACAGGAGAGGCAACTGAAGAACAAGAAACAGACAGAGGCAGAGATGCTGTATGGCAGTAC  
 TCCCCGGACACCTAGCAAAAGACCAGGACAGACGCCCAAGAAAGTCTGGCAAAATGAACACTACCACCATG  
 TCTAGTGTACACCCAACAGTAGCATTGCGCCTGTCTTTGGTGGATCAGTGTACCGGTACCTATGTCTC  
 GACTACCCCTTCTGGCAGCAAGTCAGTTGTCACTTCTCTGTGTCTGAAAGAAAACACCTCGAGCTGC  
 CCAGCTTAGGGCCAACAAGGAGAACTTGGACCTCAATGGCAGCATCCTGAGCGGTGGGTACCTGGCTCG  
 ACGCCCTCCAGCACAACTGCAGCATTAAAGTCTGTTGCCAGCACCTATTCTGAGTTTTCGGAGAACTTT  
 CAAAGGCTTCAGATCTGATGCTACGTCTCGAATCCTCAATTCAACCAACATCCAGTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230651 representing NM\_001285997  
 Red=Cloning site Green=Tags(s)

MRRSEVLADESITCLQKALTHLREIWEIIGIPEEQRLQRTEVVKKHIDLLDRMIAEEESLRERLLKSIS  
 ICQKELSTLCSELQVKPFQEEKDITILQLEKDLRTQVELMRKQKQKQELKLLQEQQELRDILCMPPC  
 DVDSTSVPTLEELKLFQRVATLRETKESTRREEFVNIKKQIILCMEELEHSPDTSFERDVVCEDESACFL  
 SLENIATLQKLLKQLEMKKSQNEAECEGLRTQIRELWDRLQIPEEEREPVEAIMTGSKTKIRNALKLEVD  
 RLEELKMQNIKQVIEKIRVELAQFWDQCFYSQEQRFAPYYSEDYTENLLHLHDAEIVRLRNYVDVHKE  
 LFQGVQKWEESWKLFLFERKASDPGRFTNRGGNLLKEEKERAKLQKTLPKLEELKARIEQWEQEHSTA  
 FVYNGQKFMIEYVTEQWELHRLEKERAKQERQLKNNKQTEAEMLYGSTPRTPSKRPGQTPKSGKMNTTMM  
 SSATPNSSIRPVFGGSVYRSPMSRLPPSGSKSVVTSLSGKKTTPRAAQLRANKENLDLNGSILSGGYPGS  
 TPLQHNSIKSVASTYSEFSRELSKASRSDATSRILNSTNIQS

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

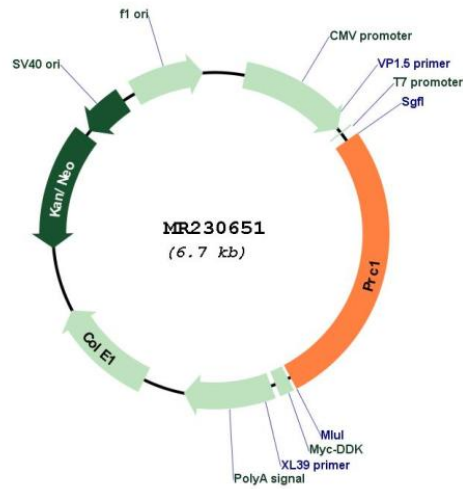
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001285997

ORF Size: 1809 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_001285997.1</a> , <a href="#">NP_001272926.1</a>
<b>RefSeq Size:</b>	3040 bp
<b>RefSeq ORF:</b>	1812 bp
<b>Locus ID:</b>	233406
<b>UniProt ID:</b>	<a href="#">Q99K43</a>
<b>Cytogenetics:</b>	7 45.62 cM
<b>MW:</b>	70.7 kDa
<b>Gene Summary:</b>	<p>Key regulator of cytokinesis that cross-links antiparrallel microtubules at an average distance of 35 nM. Essential for controlling the spatiotemporal formation of the midzone and successful cytokinesis. Required for KIF14 localization to the central spindle and midbody. Required to recruit PLK1 to the spindle. Stimulates PLK1 phosphorylation of RACGAP1 to allow recruitment of ECT2 to the central spindle. Acts as an oncogene for promoting bladder cancer cells proliferation, apoptosis inhibition and carcinogenic progression.</p> <p>[UniProtKB/Swiss-Prot Function]</p>