

## Product datasheet for **MR230149**

### Pi4kb (NM\_001293716) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pi4kb (NM_001293716) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pi4kb
Synonyms:	ESTM41; PI4K-beta; PI4Kbeta; Pik4cb
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>MR230149 representing NM\_001293716  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAATCGGCAAACGGCTGGCCACGCTCCCACTAAAGAGCAAAAAACAAAAGGCTGATCTCAGAGC  
 TTTCCCTGCTCAACCATAAGCTCCCTGCCGAGCTGGCTGCCACGGCTGGCTTTGACCACCACGTGGT  
 CCGTGTGCCCCACACACAAGCTGTTGTTCTCAATTCCAAGGATAAGGCTCCCTACCTGATCTACGTGGAA  
 GTTCTCGAATGTGAAAACCTTTGACACAAGTGTTCCTGCCCGATTCTGAAAACCGAATTCGGAGTA  
 CACGGTCTGTAGAGAACCCTGCCTGAATGTGGTACTACTCATGAGCAGCGAGCTGGCAGCTTCAGCACTGT  
 GCCCAATTATGACAATGATGATGAAGCCTGGTCAGTGGATGATATAGGCGAGCTGCAAGTGGAGCTCCCT  
 GAAGTGACACCAACAGCTGTGACAACATCTCCAGTTCTCGGTGGACAGCATCACCAGCCAGGAGAGCA  
 AGGAGCCTGTGTTCAATTGCAGCAGGGGACATCCGACGGCGCTTTTCAAGACAGCTGGCTCATACTCTAC  
 AGCCTTCAAACGAGACCCTGAAGACCCTTCTGCAGTTGCCCTCAAAGAGCCCTGGCAGGAGAAAAGTCCGG  
 AGGATCAGAGAAGGTTCCCGTATGGCCATCTTCCAATTGGCGACTCCTTTCAAGTATTGCAAGTGTG  
 GAGATGACCTTCGCCAGGAGCTGCTGGCTTTCCAGGTGTTGAAACAACCTGCAGTCCATTTGGGAACAGGA  
 GCGAGTGCCTCTTTGGATCAAGCCATAAAGATTCTTGTGATTTTCAAGTGCAGTGGCATGATTGAACCA  
 GTAGTCAACGCTGTGTCATCCACCAGGTGAAGAAACAGTCACAGCTCTCCTTGCCTGATTACTTCTCTAC  
 AGGAACATGGCAGTTATACCACTGAGGCATTCTCAGTGCCACGCGCAATTTTGTGCAAAGCTGTGCTGG  
 CTACTGCTTGGTCTGCTACCTATTGCAAGTCAAGGACAGGCACAACGGGAACATCCTTCTGGACGCAGAA  
 GGTCACATCATCCACATCGACTTTGGCTTCATCCTTTCCAGCTCACCCGAAACCTGGGCTTCGAGACAT  
 CAGCCTTTAAGCTGACCACAGAATTTGTGGATGTAATGGTGGCCTGAACGGTGATATGTTCAACTACTA  
 CAAGATGCTCATGCTGCAAGGGCTGATTGCTGCTCGGAAGCACATGGACAAGGTGGTACAGATTGTGGAG  
 ATCATGCAGCAAGTTCTCAGCTTCTTCTGCTTCCATGGCTCCAGCACCATTTCGAACTCAAAGAGAGGT  
 TCCACATGAGCATGACTGAGGAGCAGCTGCAGCTGCTGGTGGAGCAGATGGTGGACGGCAGCATGAGGTC  
 CATCACCACAAACTCTACGATGGCTTCCAGTACCTACCAATGGCATCATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230149 representing NM\_001293716  
 Red=Cloning site Green=Tags(s)

MAIGKRLATLPTKEQKTQRLISELSLLNHKLPARVWLPTAGFDHVVVRPHTQAVVLNSDKAPYLIYVE  
 VLECENFDTTSVPARIPENRIRSTRSVENLPECGITHEQRAGSFSTVPNYDNDDEAWSVDDIGELQVELP  
 EVHTNSCDNISQFSVDSITSQESKEPVFIAAGDIRRRLSEQLAHTPTAFKRDPEDPSAVALKEPWQEKVR  
 RIREGSPYGHLPNWRLSVIVKCGDDLQELLAFQVLKQLQSIWEQERVPLWIKPYKILVISADSGMIEP  
 VVNAVSIHQVKKQSQLSLLDYFLQEHGSYTTAEFLSAQRNFVQSCAGYCLVCYLLQVKDRHNGNILLDAE  
 GHIHIDFGFILSSSPRNLGFETSAFKLTTEFVDVMGGLNGDMFNYYKMLMLQGLIAARKHMDKVVQIVE  
 IMQQGSQLPCFHGSSIRNLKERFHMSMTEEQLQLLVEQMVDGSMRSITTKLYDGFYLTNGIM

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

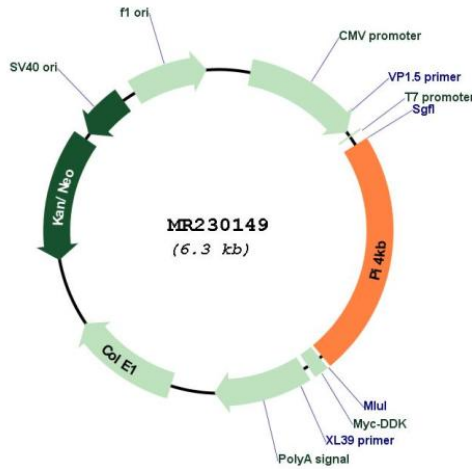
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001293716

ORF Size: 1452 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_001293716.1, NP_001280645.1</u>
<b>RefSeq Size:</b>	2849 bp
<b>RefSeq ORF:</b>	1455 bp
<b>Locus ID:</b>	107650
<b>UniProt ID:</b>	<u>Q8BKC8</u>
<b>Cytogenetics:</b>	3 F2.1
<b>MW:</b>	55.4 kDa
<b>Gene Summary:</b>	Phosphorylates phosphatidylinositol (PI) in the first committed step in the production of the second messenger inositol-1,4,5,-trisphosphate (PIP). May regulate Golgi disintegration/reorganization during mitosis, possibly via its phosphorylation (By similarity). Involved in Golgi-to-plasma membrane trafficking (By similarity).[UniProtKB/Swiss-Prot Function]