

## Product datasheet for **MR230625**

### Picalm (NM\_001252524) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Picalm (NM_001252524) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Picalm
Synonyms:	CALM; CLTH; fit-1; fit1; mKIAA4114; PAP180
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR230625 representing NM\_001252524  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGCGCCAGAGCCTGACGGACCGAATCACCGCGGCCAGCACAGTGTACTGGCTCCGCGGTATCTA  
 AGACAGTATGCAAGGCCACGACCCACGAGATCATGGGCCCAAGAAAAAGCACCTGGACTACTTAATTC  
 GTGTACAATGAGATGAATGTGAACATCCACAGTTGGCGGACAGTTTGTGGAAAGAACTACTAACAGT  
 AGTTGGGTGGTGGTCTTCAAATCACTCATTACAACATCATTTGATGGTGTATGGAAATGAGCGTTTCA  
 TTCAGTATTTGGCTTCAAGAAACACATTGTTAACTTAAGCAATTTTTGGATAAAAGTGGATTGCAAGG  
 ATATGATATGTCTACATTTATTAGACGGTATAGTAGACTTAAATGAAAAAGCAGTTTCATACAGACAA  
 GTTGCATTCGATTCACAAAAGTGAAGAGAGGAGCTGATGGAGTTATGAGAACAATGAACACAGAAAAAC  
 TCTTAAAAACTGTACCAATTATCCAAAATCAAATGGATGCACTTCTTGATTTTAAATGTTAATAGTAATGA  
 ACTTACAATGGGGTAATAAATGCTGCCTTCATGCTCCTTCAAAGATGCCATTAGACTATTTGCAGCA  
 TACAATGAAGGAATTATTAATTTATTGGAAAAATATTTTGATATGAAAAAGAACCAGTGCAAAGAAGGTC  
 TTGACATCTATAAGAAGTTTCTGACTAGGATGACAAGAATCTCAGAGTTTCTGAAAGTTGACAGAGCAAGT  
 TGGAAATGACAGAGGAGATATCCAGATCTTTCACAGGCCCCAGCAGTCTTCTTGATGCTTTAGAACA  
 CATTTAGCTTCTTGGAAAGGAAAGAAAACAAAGATCCACAGCTGCAAGCAGGGCTACAACACTTTCCA  
 ATGCAGTCTCTTCTTGGCAAGCACTGGCCTATCTCTGACCAAAGTGGATGAAAGGGAAAAACAGGCAGC  
 ATTAGAGGAAGAACAGGCTCGTTTAAAAGCATTAAAGGAACAGCGTCTAAAAGAAGTTGCAAAGAAACCG  
 CATACCTCTCTAACAACTGCAGCCTCTCCGGTGTCCACCTCAGCAGGGGAATAATGACTGCACCAGCCA  
 TTGACATATTTTCTACCCCTAGTCTTCTTAACAGCACATCTAAGCTGCCAAATGACCTGCTTGACTTGCA  
 GCAGCCAACCTTTCACCCGTCTGTCCACGCCATGTCGGCTGCTCCTCAGGGAGCGAGTACATGGGGAGGA  
 TTCAGTCTTCTCCAGTTGCACAGCCACATTCTCAGCTGGCCTTAATGTTGACTTTGAATCTGTGTTTG  
 GAAATAAATCTACGAATGTTGCTGTAGATTCTGGTGGTGGACTTCTCAAACCAACAGTGGCCTCCAGAA  
 CCAGAGTCTTCTGTTGCCAAACTTCCGCCTAACAAATAGTGTCTGACGACTTGGATTCACTTTAGCC  
 AACCTTGTGGCAATCTTGGCATTGAAATGGAACCACTAAGAATGATGTAAGTTGGAGTCAACCAGGTG  
 AAAAGAAGTAACTGGAGGATCTAACTGGCAACCAAAGGTTGCACCAACAACTGCCTGGAGCGCTGCAAC  
 AATGGCGCCCCGTGAATGGCCTATCCTGCTACTACCAACGGGCATGATAGGATATGGAATTCCTCCT  
 CAGATGGGAAGTACCTGTAATGACACAACCAACCTTAATATACAGCCAGCCTGTCATGAGACCACAA  
 ACCCTTTGGCCCTGTATCAGGAGCACAGATACAGTTTATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230625 representing NM\_001252524  
 Red=Cloning site Green=Tags(s)

MSGQSLDRITAAQHSVTGSVSKTVCKATTHEIMGPKKKHLDYLIQCTNEMNVNIPQLADSLFERTTNS  
 SWVVVFKSLITTHHLMVYGNERFIQYLASRNTLFLNLSNFLDKSGLQGYDMSTFIRRYSRYLEKAVSYRQ  
 VAFDFTKVKGADGVMRMTNTEKLLKTVPIIQNQMDALLDFNVNSNELTNGVINAAFMFLFKDAIRLFAA  
 YNEGIINLLEKYFDMKNQCKEGLDIYKFLTRMTRISEFLKVAEQVGDIDRDIPLDSQAPSSLLDALEQ  
 HLASLEGKKIKDSTAASRATTLNAVSSLASTGLSLTKVDEREKQAALEEEQARLKALKEQRLKELAKKP  
 HTSLTTAASPVSTSAGGIMTAPAIIDIFSTPSSSNSTSKLPNDLLDLQQPTFHPSVHMSAAPQGASTWGG  
 FSPSPVAQPHSSAGLNVDVFESVFNKSTNVAVDSSGGLLKPTVASQNSLQSLPVAKLPPNKLVSDDLSSLA  
 NLVGNLGIINGTTKNDVSWSQPGEKLLTGGSNWQPKVAPTAWSAATMAPPMAYPATTPTGMIGYGIIP  
 QMGVSPVMTQPTLIYSQPVMRPPNPFGPVSGAQIQFM

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

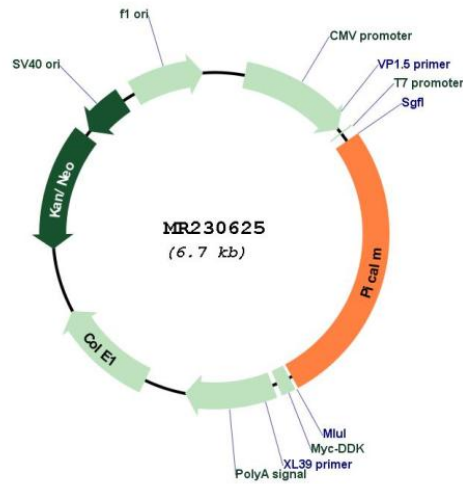
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001252524

ORF Size: 1791 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_001252524.2</a>
<b>RefSeq Size:</b>	3985 bp
<b>RefSeq ORF:</b>	1794 bp
<b>Locus ID:</b>	233489
<b>UniProt ID:</b>	<a href="#">Q7M6Y3</a>
<b>Cytogenetics:</b>	7 50.47 cM
<b>MW:</b>	65.1 kDa
<b>Gene Summary:</b>	Cytoplasmic adapter protein that plays a critical role in clathrin-mediated endocytosis which is important in processes such as internalization of cell receptors, synaptic transmission or removal of apoptotic cells. Recruits AP-2 and attaches clathrin triskelions to the cytoplasmic side of plasma membrane leading to clathrin-coated vesicles (CCVs) assembly. Furthermore, regulates clathrin-coated vesicle size and maturation by directly sensing and driving membrane curvature. In addition to binding to clathrin, mediates the endocytosis of small R-SNARES (Soluble NSF Attachment Protein REceptors) between plasma membranes and endosomes including VAMP2, VAMP3, VAMP4, VAMP7 or VAMP8. In turn, PICALM-dependent SNARE endocytosis is required for the formation and maturation of autophagic precursors. Modulates thereby autophagy and the turnover of autophagy substrates such as MAPT/TAU or amyloid precursor protein cleaved C-terminal fragment (APP-CTF).[UniProtKB/Swiss-Prot Function]