

## Product datasheet for **MG209390**

### Picalm (BC025566) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Picalm (BC025566) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Picalm
Synonyms:	MGC19382, CALM, CLTH, MGC36413, MGC36616, PAP180, mKIAA4114
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209390 representing BC025566  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCTGCGCCAGAGCCTGACGGACCGAATCACCGCGCCAGCACAGTGTACTGGCTCCGCGGTATCTA  
 AGACAGTATGCAAGGCCACGACCCACGAGATCATGGGCCCAAGAAAAAGCACCTGGACTACTTAATTCA  
 GTGTACAATGAGATGAATGTGAACATCCACAGTTGGCGGACAGTTTGTGGAAAGAACTACTAACAGT  
 AGTTGGGTGGTGGTCTTCAAATCACTCATTACAACATCATTTGATGGTGTATGGAAATGAGCGTTTCA  
 TTCAGTATTTGGCTTCAAGAAACACATTGTTAACTTAAGCAATTTTTGGATAAAAGTGGATTGCAAGG  
 ATATGATATGTCTACATTTATTAGACGGTATAGTAGACTTAAATGAAAAAGCAGTTTCATACAGACAA  
 GTTGCATTCGATTTCAAAAAGTGAAGAGAGGAGCTGATGGAGTTATGAGAACAATGAACACAGAAAAAC  
 TCTAAAAACTGTACCAATTATCCAAAATCAAATGGATGCACTTCTTGATTTTAAATGTTAATAGTAATGA  
 ACTTACAATGGGGTAATAAATGCTGCCTTCATGCTCCTTCAAAGATGCCATTAGACTATTTGCAGCA  
 TACAATGAAGGAATTATTAATTTATTGGAAAAATATTTTGATATGAAAAAGAACAGTGCAAAGAAGGTC  
 TTGACATCTATAAGAAGTTTCTGACTAGGATGACAAGAATCTCAGAGTTTCTGAAAGTTGCAGAGCAAGT  
 TGGAAATTGACAGAGGAGATATCCAGATCTTTCACAGGCCCCAGCAGTCTTCTTGATGCTTTAGAACA  
 CATTTAGCTTCTTGGAAAGGAAAGAAAACAAAGATCCACAGCTGCAAGCAGGGCTACAACACTTTCCA  
 ATGCAGTCTCTTCTTGGCAAGCACTGGCCTATCTCTGACCAAAGTGGATGAAAGGGAAAAACAGGCAGC  
 ATTAGAGGAAGAACAGGCTCGTTTAAAAGCATTAAAGGAACAGCGTCTAAAAGAAGTGCAAAGAAACCG  
 CATACCTCTCTAACAACTGCAGCCTCTCCGGTCCACCTCAGCAGGGGAATAATGACTGCACCAGCCA  
 TCGACATATTTTCTACCCCTAGTTCTTCTAACAGCACATCTAAGCTGCCAAATGACCTGCTTGACTTGA  
 GCAGCCAACCTTTCACCCGTCTGTCCATGCCATGTCGGCTGCTCCTCAGGGAGCGAGTACATGGGGAGGA  
 TTCAGTCTTCTCCAGTTGCACAGCCACATTCTCAGCTGGCCTTAATGTTGACTTTGAATCTGTGTTTG  
 GAAATAAATCTACGAATGTTGCTGTAGATTCTGGTGGCTTTGATGAACTAGGTGGACTTCTCAAACCAAC  
 AGTGGCCTCCCAGAGCCAGAGTCTTCTGTTGCCAACTCCGCCTAACAAATTAGTGTCTGACGACTTG  
 GATTCATCTTTAGCCAACCTTGTGGCAATCTTGGCATTGGAATGGAACCACTAAGAATGATGTAAGTT  
 GGAGTCAACCAGGTGAAAAGAAGTAACTGGAGGATCTAACTGGCAACCAAGGTTGCACCAACAACCTGC  
 CTGGAGCGCTGCAACAATGAATGGCATGCATTTCCACAATACGCGCCCCCTGTAATGGCCTATCCTGCT  
 ACTACACCAACGGGCATGATAGGATATGGAATTCCTCCTCAGATGGGAAGTGTACCTGTAATGACACAAC  
 CAACCTTAATATACAGCCAGCCTGTGATGAGACCACCAACCCTTTGGCCCTGTATCAGGAGCACAGAT  
 ACAGTTTATG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>MG209390 representing BC025566  
 Red=Cloning site Green=Tags(s)

MSGQSLTDRITAAQHSVTGSAVSKTVCKATTHEIMGPKKKHLDYLIQCTNEMNVNIPQLADSLFERTTNS  
 SWVVVFKSLITTHHLMVYGNERFIQYLASRNTLFNLSNFLDKSGLQGYSDFIRRYRYLNEKAVSYRQ  
 VAFDFTKVKRGADGVMRTMTEKLLKTVPIIQNQMDALLDFNVNSNELTNGVINAAFMLLFKDAIRLFAA  
 YNEGIINLLEKYFDMKNQCKEGLDIYKFLTRMTRISEFLKVAEQVQIDRGDIPDLSQAPSSLLDALEQ  
 HLASLEGKKIKDSTAASRATTLNAVSSLASTGLSLTKVDEREKQAALEEEQARLKALKEQRLKELAKKP  
 HTSLTTAASPVSTSAGGIMTAPAIDIFSTPSSNSTSKLPNDLLDLQPTFHPSVHMSAAPQGASTWGG  
 FSPSPVAQPHSSAGLNVDVFSVFNKSTNVAVDSGGFDELGGLLKPTVASQSQSLPVAKLPPNKLVSDDL  
 DSSLANLVGNLGIINGTTKNDVSWSQPGEKLLTGGSNWQPKVAPTTAWSAATMNGMHFPQYAPPVMAYPA  
 TTPTGMIGYGIPPQMGSVPMVTQPTLIYSQPVMRPPNPF GPVSGAQIQFM

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

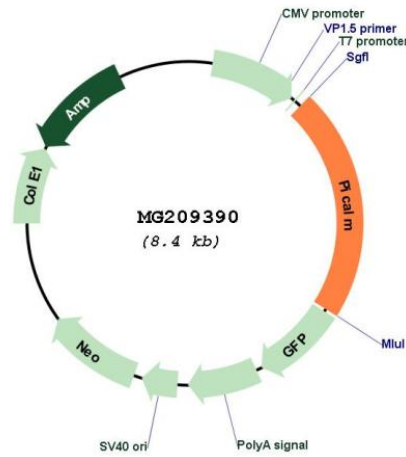
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: BC025566  
 ORF Size: 1830 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="#">BC025566.1</a>
<b>RefSeq Size:</b>	3550 bp
<b>RefSeq ORF:</b>	1832 bp
<b>Locus ID:</b>	233489
<b>Cytogenetics:</b>	7 50.47 cM
<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]