

## Product datasheet for **MR230166**

### Abi2 (NM\_001198570) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Abi2 (NM_001198570) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Abi2
Synonyms:	8430425M24Rik; A1839867; C130078H13
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR230166 representing NM\_001198570  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGAGCTGCAGATGCTGCTGGAAGAGGAAATCCCGGGGGCCCGGGCTCTCTTCGACAGCTACA  
 CGAATCTGGAGCGGGTGGCCGACTACTGCGAGAATAACTACATCCAGTACCAGATAAGCAGCGAGCCCT  
 AGAAGAAACCAAAGCCTACACCACTCAATCCTTAGCAAGTGTTCGTATCTGATAAACACCTTGGCCAAC  
 AATGTCCTACAGATGCTGGATATCCAGGCATCACAGTTACGGAGGATGGAGTCTTCAATCAACCATATTT  
 CACAAACAGTTGATATTCATAAAGAGAAGTTGCAAGAAGAGAAAATTGGATTTTACCACCAATAAAAA  
 CACTTCAAGGACCATAAGATTATTGCGCCAGCCAACCTTGAGCGGCCAGTTCGTATATTCGAAAACT  
 ATTGACTACACAATTTAGATGACATTGGACATGGAGTGAAGTGGTTGCTTAGATTTAAGGTGAGTACCC  
 AGAATATGAAAAAGGGTGGATTGCCACGTACGACACCTCCAACCTCAGAAGCCCCAAGTCCCCTATGTC  
 AGGGAAGGGGACACTTGGCGGCACTCCCCTATCGAACACTGGAGCCAGTGCCTCCTCAGTGGTACCA  
 AATGATTACGTACTAGCCCAACCCGTAATATGGCTCCCTCGCAGCAGAGCCCTGTGAGGACAGCTCTG  
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 CAGTCGGGAGAACAGCGGAAGTGGTAGTGTGGGGTACCCATTGCTGTGCCTACTCCGTCTCCTCCAAGC  
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 TGATGGCTTCACTTCTCCAACCTCCCCTGTTATTTCTTAACCCCCCACAGGTCATCCTGTTCAAGTTC  
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 CTCCTTCCATAACGTCAAAACAAGCCTTCAGAATCAGATGAATGGAGGTCCTTTTTATAACCAGAAATCC  
 AGTTTCAGATACACCACCTCCACCCACCTGTGGAAGAGCCAGTCTTTGATGAATCCCCCTCCACCG  
 CCTCTCCAGAAGATTATGAAGAGGAGGAAGCAGCTGTGGTTGAGTACAGCGATCCGTACGCTGAAGAGG  
 ACCCACGTTGGCGCAAGGGCTTACTTGGAAAAGTTGTGGCAATTTATGATTATACAAAAGACAAGGA  
 AGATGAGCTGCTCTTTCAGGAAGGAGCCATTATATATGTCATCAAGAAGAATGACGATGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230166 representing NM\_001198570  
 Red=Cloning site Green=Tags(s)

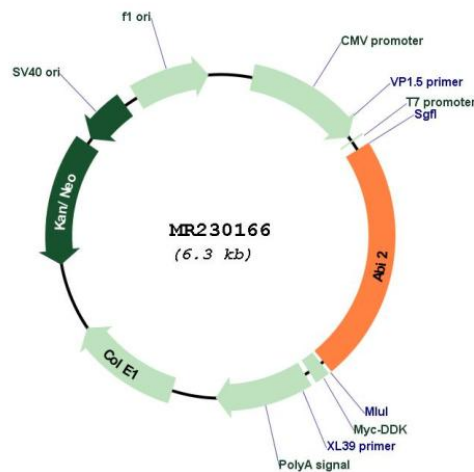
MAELQMLLEEEIPGGRRALFDSYTNLERVADYCENNYIQSPDKQRALEETKAYTTQSLASVAYLINTLAN  
 NVLQMLDIQASQLRRMESSINHISQTVDIHKEKVARREIGILTNNKNTSRTHKIIAPANLERPVYIRKP  
 IDYITLDDIGHGVKWLRFKVVSTQNMKGGLPRTTPTQKPPSPMSGKTLGRHSPYRTLEPVRPPVVP  
 NDYVPSPTRNMAPSQSPVRTASVNQRNRTYSSGSSGGSHPSRSSSRENSGSGSVGVP IAVPTPSPPS  
 VFPAPAGSAGTPPLPATASVPTPLVPATVPSSTAPDAAAAGGAQSLADGFTSPTPPVISSNPPTGHPVQF  
 YSMNRPASRHTPPTIGGSLPYRRPPSITSQTSLQNMNGGPFYNQNPVSDTPPPPPVVEEPVFDESPPPP  
 PPEDEYEEEEAAVVEYSOPYAEEDPPWAPRAYLEKVVAIYDYTKDKEDELSFQEGAIIVYIKKNDDE

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001198570

**ORF Size:** 1461 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_001198570.1](#), [NP\\_001185499.1](#)

**RefSeq Size:** 4821 bp

**RefSeq ORF:** 1464 bp

**Locus ID:** 329165

**UniProt ID:** [P62484](#)

**Cytogenetics:** 1 C2

**MW:** 53.4 kDa

**Gene Summary:** Regulator of actin cytoskeleton dynamics underlying cell motility and adhesion. Functions as a component of the WAVE complex, which activates actin nucleating machinery Arp2/3 to drive lamellipodia formation (By similarity). Acts as regulator and substrate of nonreceptor tyrosine kinases ABL1 and ABL2 involved in processes linked to cell growth and differentiation. Positively regulates ABL1-mediated phosphorylation of ENAH, which is required for proper polymerization of nucleated actin filaments at the leading edge (By similarity). Contributes to the regulation of actin assembly at the tips of neuron projections. In particular, controls dendritic spine morphogenesis and may promote dendritic spine specification toward large mushroom-type spines known as repositories of memory in the brain (PubMed:15572692). In hippocampal neurons, may mediate actin-dependent BDNF-NTRK2 early endocytic trafficking that triggers dendrite outgrowth (PubMed:27605705). Participates in ocular lens morphogenesis, likely by regulating lamellipodia-driven adherens junction formation at the epithelial cell-secondary lens fiber interface (PubMed:15572692). Also required for nascent adherens junction assembly in epithelial cells (By similarity). [UniProtKB/Swiss-Prot Function]