

## Product datasheet for **MG206165**

### **Abi1 (NM\_007380) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Abi1 (NM_007380) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Abi1
Synonyms:	abi-1; E3B1; NAP1; Ssh3bp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG206165 representing NM\_007380  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCAGAGCTGCAGATGTTACTAGAGGAGGAGATCCCGTCTGGCAAGAGGGCGCTGATAGAGAGTTACC  
 AGAACCTGACCCGGTGGCGGACTACTGTGAAAACAATAATACAGGCTACAGACAAGAGAAAAGCTCT  
 AGAAGAGACCAAAGCATATACACTCAATCTCTAGCTAGTGTGCTTATCAAATAAATGCATTGGCCAAC  
 AATGTGCTCCAGCTGCTGGATATCCAAGCATCTCAGCTGCGGAGGATGGAGTCATCCATCAATCACATCT  
 CACAGACTGTGGATATTCATAAAGAAAAAGTGGCTCGAAGAGAGATTGGTATTTTGACAACAAAAGAA  
 TACATCAAGAACTCACAAAATAATCGCACCCGCAAAATATGGAGCGTCTGTGAGTATATTCGGAACCT  
 ATCGACTATACAGTTCGGATGATGTGGCCATGGAGTTAAGCACGAAATAACCCAGCTGCAAGAAGCTG  
 GCACATTGTGAGAACAACCCCTCCACGCAGAAACCACCAAGCCCTCCCGTGTGGGCGGAGGGACTTT  
 GGGACGGAATACCCCTTACAAAACCTAGAGCCTGTTAAGCCTCCAACAGTTCCTCAATGACTACATGACT  
 AGTCTGCGAGGCTTGAAGCCAGCATAGTCCAGGCAGGACAGCTTCTTTAAATCAGAGACCAAGGACGC  
 ATAGTGAAGTAGTGGAGGAAGCGGAAGCCGAGAGAACAGTGGGAGCAGCAGCATTGGCATTCTATTGC  
 TGTGCCTACGCCCTACCGCCACTGCGGGCCAGCAGCCCTGGCGCAGCTCCTGGTCCAGTATGGC  
 ACAATGACCAGGCAGATTTCTCGACACAACCTTACCACCTCTTCGACATCTTCTGGTGGATATAGACGAA  
 CTCCCTCTGTGACCGCCAATTCTCTGCTCAGCCTCATGTTAATGGAGGTCCACTTTATTCTCAAAATTC  
 AATTTCTGTTGCCCTCCTCCTCCCCCATGCCTCAGTTGACTCCACAGATCCCTCTCACAGGCTTCGTG  
 GCCAGGTTGCAGGAAAACATTGCTGATAGCCCAACTCCACCACCACCCCTCCACCAGATGACATCCCA  
 TGTTTGACTCTCCGCTCCTCCGCCACCTCCTCCTGTGACTATGAAGATGAGGAAGCTGCAGTACT  
 TCAGTATAGTGACCCATATGCAGATGGGACCCTGCATGGGCTCCCAAGAAGTATATTGAGAAAGTTGTT  
 GCAATATATGATTATACAAAAGACAAGGATGATGAGCTGTCTTTAAAGAGGGTGAATCATCTATGTTA  
 TAAAGAAGAATGATGATGGCTGGTTTGAAGGAGTTGCAATCGAGTACTGGACTCTTCCCTGGGAATA  
 TGTTGAATCAATCATGCACTATACTGAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG206165 representing NM\_007380  
 Red=Cloning site Green=Tags(s)

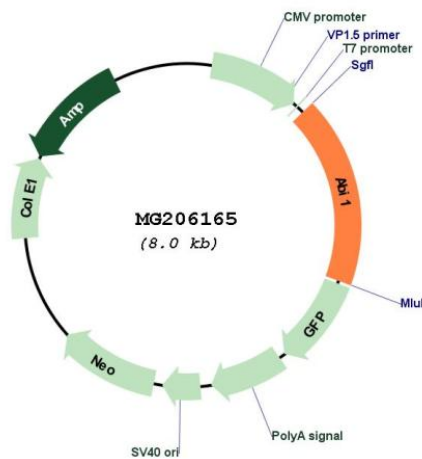
MAELQMLLEEEIPSGKRALIESYQNLTRVADYCENNYIQATDKRKALEETKAYTTQSLASVAYQINALAN  
 NVLQLLDIQASQLRRMESSINHISQTVDIHKEKVARREIGILTNNKNTSRTHKIIAPANMERPVRYIRKP  
 IDYTVLDDVGHGVKHNQPARTGLSRTNPPTQKPPSPPVSGRGTGRNTPYKTLEPVKPPPTVPNDYMT  
 SPARLGSQHSPGRTASLNQRPRTHSGSSGSGSRENSGSSSIGIPIAVPTSPPTAGPAAPGAAPGASQYG  
 TMTRQISRHNSTTSSTSSGGYRRTPSVTAQFSAQPHVNGGPLYSQNSISVAPPPPPMPQLTPQIPLTGFV  
 ARVQENIADSPTPPPPPPDDIPMFDDSPPPPPPPVDYEDEAAVVQYSDPYADGDPAWAPKNYIEKVV  
 AIYDYTKDKDDELSFKEGAIYVIKKNDDGWFEGVCNRVTGLFPGNYVESIMHYTD

**TR**TRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_007380

**ORF Size:** 1425 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\\_007380.2](#), [NP\\_031406.2](#)

**RefSeq Size:** 3486 bp

**RefSeq ORF:** 1428 bp

**Locus ID:** 11308

**UniProt ID:** [Q8CBW3](#)

**Cytogenetics:** 2 15.18 cM

**Gene Summary:** May act in negative regulation of cell growth and transformation by interacting with nonreceptor tyrosine kinases ABL1 and/or ABL2. In vitro, at least isoform 2 and isoform 4 suppress the transforming activity of Abelson murine leukemia virus (v-Abl) after overexpression in fibroblasts. May play a role in regulation EGF-induced Erk pathway activation. Involved in cytoskeletal reorganization and EGFR signaling. Together with EPS8 participates in transduction of signals from Ras to Rac. In vitro, a trimeric complex of ABI1, EPS8 and SOS1 exhibits Rac specific guanine nucleotide exchange factor (GEF) activity and ABI1 seems to act as an adapter in the complex. Regulates ABL1/c-Abl-mediated phosphorylation of ENAH. Recruits WASF1 to lamellipodia and there seems to regulate WASF1 protein level. In brain, seems to regulate the dendritic outgrowth and branching as well as to determine the shape and number of synaptic contacts of developing neurons.  
[UniProtKB/Swiss-Prot Function]