

Product datasheet for **MR217178**

Abi1 (NM_145994) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Abi1 (NM_145994) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Abi1
Synonyms:	abi-1; E3B1; NAP1; Ssh3bp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR217178 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGAGCTGCAGATGTTACTAGAGGAGGAGATCCCGTCTGGCAAGAGGGCGCTGATAGAGAGTTACC
 AGAACCTGACCCGGTGGCGGACTACTGTGAAAACAATAATACAGGCTACAGACAAGAGAAAAGCTCT
 AGAAGAGACCAAAGCATATACAACTCAATCTCTAGCTAGTGTGCTTATCAAATAAATGCATTGGCCAAC
 AATGTGCTCCAGCTGCTGGATATCCAAGCATCTCAGCTGCGGAGGATGGAGTCATCCATCAATCACATCT
 CACAGACTGTGGATATTCATAAAGAAAAAGTGGCTCGAAGAGAGATTGGTATTTTGACAACAAAAGAA
 TACATCAAGAACTCACAAAATAATCGCACCCGCAAAATATGGAGCGTCTGTCCAGTATATTCGGAACCT
 ATCGACTATACAGTTCGGATGATGTGGCCATGGAGTTAAGCACGAAATAACCAAGCCTGCAAGAAGCTG
 GCACATTTGTCGAGAACAACCCCTCCACGCAGAAACCACCAAGCCCTCCCGTGTGGGCCGAGGGACTTT
 GGGACGGAATACCCCTTACAAAACCTAGAGCCTGTTAAGCCTCCAACAGTTCCTCAATGACTACATGACT
 AGTCCTGCGAGGCTTGAAGCCAGCATAGTCCAGGCAGGACAGCTTCTTTAAATCAGAGACCAAGGACGC
 ATAGTGAAGTAGTGGAGGAAGCGGAAGCCGAGAGAACAGTGGGAGCAGCAGCATTGGCATTCTATTGC
 TGTGCCTACGCCCTACCGCCACTGCGGGCCAGCAGCCCTGGCGCAGCTCCTGGTCCAGTATGGC
 ACAATGACCAGGCAGATTTCTCGACACAACCTCTACCCTTCTTCGACATCTTCTGGTGGATATAGACGAA
 CTCCTTCTGTGGCCGCCAATTCTCTGCTCAGCCTCATGTTAATGGAGGTCCACTTTATTCTCAAAATTC
 AATTTCTGTTGCCCTCCTCCTCCCCCATGCCTCAGTTGACTCCACAGATCCCTCTCACAGGCTTCGTG
 GCCAGGTTGCAGAAAACATTGCTGATAGCCCAACTCCACCACCACCCCTCCACCAGATGACATTCCTCA
 TGTTTGTGACTCTCCGCTCCTCCGCCACCTCCTCCTGTGACTATGAAGATGAGGAAGCTGACGTAGT
 TCAGTATAGTGACCCATATGCAGATGGGACCCCTGCATGGGCTCCAAGAAGTATATTGAGAAAGTTGTT
 GCAATATATGATTATACAAAAGACAAGGATGATGAGCTGTCTTTAAAGAGGGTGAATCATCTATGTTA
 TAAAGAAGAATGATGATGGCTGGTTTGAAGGAGTTGCAATCGAGTGACTGGACTCTTCCCTGGAACTA
 TGTTGAATCAATCATGCACTATACTGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217178 protein sequence
 Red=Cloning site Green=Tags(s)

MAELQMLLEEEIPSGKRALIESYQNLTRVADYCENNYIQATDKRKALEETKAYTTQSLASVAYQINALAN
 NVLQLLDIQASQLRRMESSINHISQTVDIHKEKVARREIGILTTNKNTSRTHKIIAPANMERPVYIRKP
 IDYTVLDDVGHGKVGKHNQPARTGTLSRNPPQKPPSPVSGRGTGRNTPYKLTLEPKPPTVPNDYMT
 SPARLGSQHSPGRTASLNQRPRTSHSGSSGSGSRENSGSSSIGIPIAVPTSPPTAGPAAPGAAPGSQYG
 TMTRQISRHNSTTSSTSSGGRTPSVAAQFSAQPHVNGGPLYSQNSISVAPPPPPMPQLTPQIPLTGFV
 ARVQENIADSPTPPPPPPDDIPMFDDSPPPPPPPVDYEDEEAADVQSDPYADGPAWAPKNYIEKVV
 AIYDYTKDKDELDFKEGAIYVVIKKNDDGWFEGVGNRVTLFPGNYVESIMHYTD

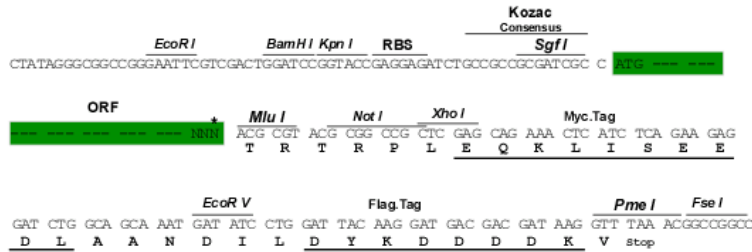
TRTRPLEQ**KL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_145994

ORF Size: 1428 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_145994.3](#)
RefSeq Size: 3413 bp

RefSeq ORF: 1431 bp

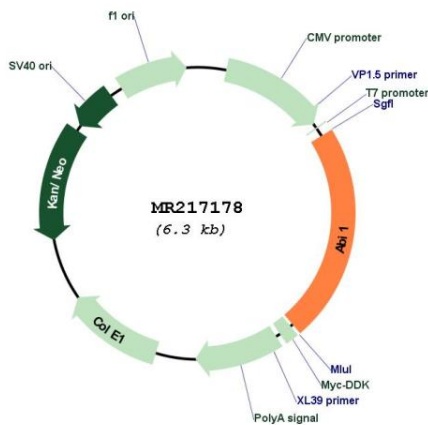
Locus ID: 11308

Cytogenetics: 2 15.18 cM

MW: 51.7 kDa

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]

Product images:



Circular map for MR217178