

## Product datasheet for **SC319050**

### **ABI2 (NM\_005759) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	ABI2 (NM_005759) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABI2
Synonyms:	ABI-2; ABI2B; AbIBP3; AIP-1; AIP1; argBP1; argBP1A; argBP1B; SSH3BP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_005759.4  
 GGAGGAGGAGGAGGAGGATGTGAAGATGGCGGAGCTGCAGATGCTGCTGGAAGAGGAAAT  
 CCCGGGGGGCCGCGGGCCCTCTTCGACAGCTACACAAATCTGGAACGGGTGGCCGATTA  
 CTGCGAGAACAACATACATACAGTCAGCAGATAAGCAGAGAGCCCTAGAAGAAACCAAAGC  
 CTACACCACCCAATCCTTAGCAAGTGTTCCTATCTGATAAACACCTTGGCCAACAATGT  
 CCTGCAGATGCTGGATATCCAGGCATCCAGCTACGAAGGATGGAATCTTCAATCAATCA  
 TATTTTCAAAACAGTTGATATTTTATAAAGAGAAAGTTGCAAGAAGAGAAATTTGGTATTTT  
 GACTACCAATAAAAAACACTTCAAGGACACATAAGATTATTGCTCCAGCCAACCTTGAACG  
 ACCAGTTCGTTATATTAGAAAACCTATTGACTATAACAATTCTAGATGATATTGGACATGG  
 AGTAAAGGTGAGTACCCAGAACATGAAGATGGGTGGGCTGCCGCTACAACACCTCCAAC  
 TCAGAAGCCCCCTAGTCCCCTATGTCAGGGAAAGGGACACTTGGGCGGCACTCCCCTA  
 TCGCACACTGGAGCCAGTGCCTCCAGTGGTACCAAATGATTACGTACCTAGCCCAAC  
 CCGTAATATGGTCCCTCGCAGCAGAGCCCTGTGAGGACAGCTTCTGTGAATCAAAGAAA  
 TCGAACTTACAGCAGCAGTGGGAGTAGTGGAGGGAGCCACCAAGTAGTCGGAGCAGCAG  
 TCGAGAGAACAGTGAAGTGGTAGTGTGGGGTTCCTATTGCTGTTCTACTCCATCTCC  
 TCCAGTGTCTTCCAGTTCATCTGTACAGTTCTACAGCATGAATAGGCCTGCCTCTCG  
 CCATACTCCCCAACAAATAGGGGGCTCGTTGCCCTATAGACGCCCTCCTTCCATTACTTC  
 ACAAAACAGCCTTCAGAAATCAGATGAATGGAGGACCTTTTATAGCCAGAATCCAGTATC  
 TCTTGCTCCTCCTCCCTCCATCCTACAGGTAACCTCCTCAGTTACCTTTAATGGGATT  
 TGTGGCCAGAGTCCAAGAAAATATTTTTCAGATACACCACCTCCACCGCCACCTGTGGGAAG  
 ACCAGTCTTTGATGAGTCTCCCCACCTCCTCCTCCTCCAGAAGATTACGAAGAGGAGGA  
 AGCTGCTGTGGTTGAGTATAGTGATCCTTATGCTGAAGAGGACCCACCGTGGGCTCCACG  
 TTCTTACTTGGAAAAGGTTGTGGCAATTTATGACTATACAAAAGACAAGGAAGATGAGCT  
 GTCCTTTTCAGGAAGGAGCCATTATTTATGTCATCAAGAAGAATGACGATGGTTGGTATGA  
 GGGAGTTATGAATGGAGTACTGGGCTTTTTCCTGGGAATTACGTTGAGTCTATCATGCA  
 TTATTCTGAGTAAAGCTCAGCAGGGCTGTGCTTGCCTCACAGGAATAGTCAGGTCTTCCC  
 AGATTATCTGAAGGCCCTGGGGATTCCACTCCAGTAAAGTAGAATGAAGGATACAAATGA  
 TAAAAATTACACTTTTTTTTTTTGGTTTATTCCCCAGTATAAAAACAAAGCAAGCTGAGT  
 CTGAACAAATGGATCTTCTGCCATCATTTGTACAATGCTGAGCTGTCTGGATTGAAATA  
 AAATGACCATTTTTATGTATGTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire

**ACCN:** NM\_005759

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_005759.4](#), [NP\\_005750.4](#)

**RefSeq Size:** 6489 bp

**RefSeq ORF:** 1428 bp

**Locus ID:** 10152

**UniProt ID:** [Q9NYB9](#)

**Cytogenetics:** 2q33.2

**Domains:** SH3

**Protein Pathways:** Regulation of actin cytoskeleton

**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 (PubMed:21107423). 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 (PubMed:7590236, PubMed:8649853, PubMed:10498863). 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 (By similarity). In hippocampal neurons, may mediate actin-dependent BDNF-NTRK2 early endocytic trafficking that triggers dendrite outgrowth (By similarity). Participates in ocular lens morphogenesis, likely by regulating lamellipodia-driven adherens junction formation at the epithelial cell-secondary lens fiber interface (By similarity). Also required for nascent adherens junction assembly in epithelial cells (PubMed:15572692).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks an alternate in-frame exon in both the 5' and central coding regions, but includes an additional in-frame exon in the 3' coding region, compared to variant 1. The encoded isoform (c) is shorter than isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.