

Product datasheet for **SC312856**

ABI2 (X95677) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ABI2 (X95677) Human Untagged Clone
Tag: Tag Free
Symbol: ABI2
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for X95677, the custom clone sequence may differ by one or more nucleotides

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ATGAAGATGGGTGGGCTGCCGCTACAACACCTCCAACCTCAGAAGCCCCCTAGTCCCCCT
ATGTCAGGGAAAGGGACACTTGGCAGCAGTGGGAGTAGTGGAGGGAGCCACCCAAGTAGT
CGGAGCAGCAGTCGAGAGAACAGTGGAAAGTGGTAGTGTGGGGTTCCTATTGCTGTTCT
ACTCCATCTCCTCCAGTGTCTTTCCAGCCCCTGCGTGTCTGTGCGACTCCTCCCCTT
CCTGCTACTTCTGCATCTGCCCTGCTCCTCTTGTTCCTGCTACTGTCCCTTCTCCACT
GCCCCAGACGCTGCTGCTGGGGGTGCCAGACCCTTGCTGATGGCTTCACTTCTCCAAC
CCCCCTGTTGTTTCTCCACTCCCCTACAGGTCATCCTGTACAGTTCTACAGCATGAAT
AGGCCTGCTCTCGCCATACTCCCCAACAAATAGGGGGCTCGTTGCCCTATAGACGCCCT
CCTTCCATTACTTCACAAACAAGCCTTTCAGAAATCAGATGAATGGAGGACCTTTTTATAGC
CAGAAATCCAGTTTCAGATACACCACCTCCACCGCCACCTGTGGAAGAACCAGTCTTTGAT
GAGTCTCCCCACCTCCTCCTCCTCCAGAAGATTACGAAGAGGAGGAAGCTGCTGTGGTT
GAGTATAGTGATCCTTATGCTGAAGAGGACCCACCGTGGGCTCCACGTTCTTACTTGAA
AAGGTTGTGGCAATTTATGACTATACAAAAGACAAGGAAGATGAGCTGTCCTTTCAGGAA
GGAGCCATTATTTATGTCATCAAGAAGAATGACGATGGTTGGTATGAGGGAGTTATGAAT
GGAGTGACTGGGCTTTTTCTGGGAATTACGTTGAGTCTATCATGCATTATTCTGAG
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Restriction Sites: Please inquire
ACCN: X95677
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).



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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: [X95677.1](#), [CAA64980.1](#)

RefSeq Size: 2374 bp

RefSeq ORF: 900 bp

Locus ID: 10152

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]