

Product datasheet for **SC316852**

AAK1 (NM_014911) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AAK1 (NM_014911) Human Untagged Clone
Tag:	Tag Free
Symbol:	AAK1
Vector:	<u>pCMV6 series</u>



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_014911, the custom clone sequence may differ by one or more nucleotides

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ATGAAGAAGTTTTTCGACTCCCGCGAGAGCAGGGCGGCTCTGGCCTGGGCTCCGGCTCCAGCGGAGGAG
GGGGCAGCACCTCGGGCCTGGGCAGTGGCTACATCGGAAGAGTCTTCGGCATCGGGCAGCAGAGTCCAC
AGTGGACGAGGTGTTGGCGGAAGGTGGATTTGCTATTGTATTTCTGGTGAGGACAAGCAATGGGATGAAA
TGTGCCTTGAAACGCATGTTTGTCAACAATGAGCATGATCTCCAGGTGTGCAAGAGAGAAAATCCAGATAA
TGAGGGATCTTTTCAGGGCACAAGAATATTGTGGGTTACATTGATTCTAGTATCAACAACGTGAGTAGCGG
TGATGTATGGGAAGTGCTCATTCTGATGGACTTTGTAGAGGTGGCCAGGTGGTAAACCTGATGAACCCAG
CGCCTGCAAAACAGGCTTTACAGAGAATGAAGTGTCCAGATATTTTGTGATACCTGTGAAGCTGTTGCC
GCCTGCATCAGTGCAAACTCCTATTATCCACCGGACCTGAAGGTTGAAAACATCCTCTTGATGACCG
AGGCCACTATGTCCTGTGTGACTTTGGAAGCGCCACCAACAAATCCAGAATCCACAACTGAGGGAGTC
AATGCAGTAGAAGATGAGATTAAGAAATACACAACGCTGTCTATCGAGCACCAGAAATGGTCAACCTGT
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CTTCACTTTGCCATTTGGGGAAAGTCAGGTGGCAATTTGTGATGAAAACCTCACAATTCCTGATAATTCT
CGATATTTCTCAAGACATGCACTGCCTAATTAGGTATATGTTGGAACCCAGACCCTGACAAAAGGCCGGATA
TTTACCAGGTGTCCTACTTCTCATTAAAGTACTCAAGAAAGAGTGCCCAATTCCAAATGTACAGAACTC
TCCCATTCCTGCAAAGCTTCTGAACAGTGAAGCCAGTGAGGCAGCTGCAAAAAGACCCAGCCAAAAG
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AGACTCAGCCGAACCCAGGAATCCTTCCATCCAGCCAGCGCTGACACCCCGGAAGAGGGCCACTGTTCA
GCCCCCACTCAGGCTGCAGGATCCAGCAATCAGCCTGGCCTTTTAGCCAGTGTTCACCAACCAAAACCC
CAAGCCCACTCCAGCCAGCCTCTGCCGCAAACTCAGGCCAAGCAGCCACAGGCTCCTCCACTCCACAGC
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CAGCAGCAGCAGGCCAGACTCAGCAGTTTCAGGCAGTACATCCAGCAACCCAGCAACCAGCAATTGCTC
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GCTGCCTTGACAGAAAAGCCACTATGGCAGCAGGACAGCAGCCCGCCAGCCACAGCCAGCTGCAGCCCCAC
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AGCTGCTCCAGGCAGCTGCAGCTGAGGCCAGTCTCAATAAGTCCAAGTCTGCAACCCACTCCATCAGG
CTCTCCTCGGACCTCTCAACAAAACGTTTATAATCCTTCAGAAGGGTCTACGTGGAATCCCTTTGATGAC
GATAATTTCTCCAACTCACAGCTGAAGAACTGCTAAACAAGGACTTTGCCAAGCTTGGGGAAGGCAAAAC
ATCCCAGAAAGCTTGGAGGCTCAGCTGAGAGTTTGATCCAGGCTTTCAATCAACCAAGGTGATGCTTT
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GACAAGGTGGCTGAAGATGAGTTTGACCCTATTCTGTATTGATAACCAAAAACCAAGGTGGGCACT
CTAGAAACAGCAGTGGGAGCTCTGAGTCCAGTCTTCCCAACTAGCCAGGCTTTACTGCTGGTGGATCA
GCTCATAGACCTGTAG
    
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Restriction Sites: Please inquire

ACCN: NM_014911

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 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_014911.3](#), [NP_055726.3](#)

RefSeq Size: 21283 bp

RefSeq ORF: 2886 bp

Locus ID: 22848

UniProt ID: [Q2M2I8](#)

Cytogenetics: 2p13.3

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Gene Summary:

This gene encodes a member of the SNF1 subfamily of serine/threonine protein kinases. Adaptor-related protein complex 2 (AP-2 complexes) functions during receptor-mediated endocytosis to trigger clathrin assembly, interact with membrane-bound receptors, and recruit endocytic accessory factors. The encoded protein interacts with and phosphorylates a subunit of the AP-2 complex, which promotes binding of AP-2 to sorting signals found in membrane-bound receptors and subsequent receptor endocytosis. Its kinase activity is stimulated by clathrin. This kinase has been shown to play an important role in regulating the clathrin-mediated endocytosis of the rabies virus, facilitating infection. Inhibitors of this kinase are being studied as candidate therapeutics to disrupt the entry of viruses, including SARS-CoV-2, into target cells. It is also involved in positive regulation of Notch pathway signaling in mammals. Alternatively spliced transcript variants have been described, but their biological validity has not been determined. [provided by RefSeq, Aug 2020]