

Product datasheet for **MC222855**

Aak1 (NM_001040106) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aak1 (NM_001040106) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Aak1
Synonyms:	5530400K14Rik; 9630042K20; AU067724; AU067726; BC028270; C79663; D6Ertd245e; mKIAA1048; R75501
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC222855 representing NM_001040106
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGAAGTTTTTCGACTCCAGGCGGGAGCAGGGGAGCTCTGGCCTGGGTTTCAGGCTCCAGCGGAGGAG
 GGGCAGCAGCTCAGGCCTGGGCAGTGGTTACATCGGAAGGGTCTTCGGCATCGGAGGCAGCAGGTCAC
 CGTGGACGAGGTGTTGGCGGAAGGTGGATTTCGCTCTTGTCTTTCTGGTGAGAAACAAGCAATGGGGTGAAA
 TGTGCCTTGAAACGATGTTTGTCAACAATGAACATGACCTCCAGGTGTGCAAGAGGGAGATCCAGATCA
 TGAGAGACCTATCAGGGCACAAGAACATTGTGGGCTACATTGATTCTAGTATCAACAATGTGAGCAGCGG
 CGACGCTGGGAAGTTCTCATTCTCATGGACTTCTGCAGAGGAGGCCAGGTGGTAAACCTGATGAACCG
 CGTCTCCAGACAGGCTTCACAGAGAATGAAGTGTGCAGATATTCTGTGACACCTGTGAAGCTGTGGCCC
 GCCTGCATCAGTGCAAACTCCCATTATCCACCGGGACCTGAAGGTTGAAAATATCCTCTTGCATGACCG
 AGGCCACTATGTCTTGTGTGACTTTGGAAGTGCCACCAACAAATCCAGAATCCACAGGCCGAGGGAGTC
 AATGCAGTAGAAGATGAGATTAAGAAATACACAACGCTCTCCTATCGAGCCCCAGAAATGGTCAACTTGT
 ACAGTGGCAAAATCATCACTACGAAGGCAGATATTTGGGCTCTAGGCTGTTTGTGTATAAATTATGCTA
 CTTCACTTTGCCGTTTGGGGAGAGCCAGGTGGCGATTTGTGACGGAAGCTTCACAATTCCTGATAACTCT
 CGTTATTTCTCAAGATATGCACTGCCTTATTAGGTATATGTTGGAACCAGACCCTGACAAAAGGCCGATA
 TTTACCAGGTTTCATACTTCTCATTAAACTACTCAAGAAAGAATGCCCGTTCCAAATGTACAGAACTC
 TCCCATTCCTGCAAACTTCTGAACAGTGAAAGCCAGTGAAGCAGCTGTGAAAAGACCCAGCCAAAG
 GCCAGACTGACCGATCCCATTCCACCACAGAGACTTCAATCGCACCCCGCCAGAGGCCCTAAAGCTGGGC
 AGACTCAGCCAAACCCAGGCATCCTTCCATCCAGCCAGCCCTGACTCCTCGGAAGAGGGCCACTGTTCA
 GCCCTACCTCAGGCTGCAGGACCCAGCAATCAGCCTGGACTTCTACCCAGTGTTTCCCAACCTAAAGCC
 CAAGCCACACCCAGTCAACCTCTCAGTCATCTCAACCCAAGCAACCACAAGCTCCACCCACCCACAGC
 AGACACCTGTACCCAGACACAAGGTTTGGCCACCCAGGCCAGGCCACTCCCCAGCACCAGCAGCAACA
 CCTCCTCAAGCAACAGCAGCAACAGCAGCAACAGCCTCAGCAGCCTACAGCACCACCACAGCCTGCAGGC
 ACCTTTTACCAGCAGCAGCAACAGCAGCAGCAGCAGGCTCAGACTCAGCAGTTTCAGGCAGTACATC
 CAGCAGCCAGCAACCAGTCACTGCTCAGTTCCTGTGGGGTCCCAGGGAGGTGCTCAGCAACAGCTGAT
 GCAGAACTTCTACCACCAGCAGCAACAGCAGCAGCAGCAGCAGCAGCTGATGGCTCAGCAGGCTGCC
 CTGCAGCAGAAGACTGCTGTGGTGTAGTACCACAGTCTCAGGCACAGCCGCCACAGCCCCACAGGCAGCTG
 CTGCCCAGGAGCCTGGGCAGATTCAAGCCCCAGTGAGACAACAGCCAAAAGTTTACAGACCCTCCACCTCC
 AACCATCCAGGGACAGAAAGTTGGATCTCTCACTCCTCCATCATCACCCAAAACCAACGTGCTGGGCAC
 AGACGGATTCTCAGTGATGTAACCCACAGTGCAGTCTTTGGGGTCTGCCAGCAAAATCAACCCAGCTGC
 TCCAGGCAGCTGCAGCTGAGGCCAGTCTCAATAAATCTAAGTCTGCAACCACCCTCCCTCAGGCTCTCC
 ACGGACTTCACAGCAGAAATGTCTCCAATGCTTCAGAAGGCTCCACATGGAATCCTTTTGTGACGACAAC
 TTCTCCAAACTCACAGCTGAAGAGCTGCTAAACAAGGACTTTGCCAAGCTTGGGAAGGAAAGCTGCCTG
 AGAAGCTTGGTGGCTCTGCAGAGAGTTTGTATCCAGGCTTCCAGCCAACAAGGAGATGCCTTCCACC
 TCCTTCTTTTCTGCTGGAACCTGCTGAAAAAGGAAGGGGGCCAGGCTGTGGACTCTGGCATGCCACTT
 CTAAGTGTGCTGATCCCTTATTCTCTTCAAGTACCTGATGCTCCAGAAAACTAATCGAGGGACTCA
 AATCTCCTGACACTTCTTCTGCTCCCTGACCTCTTGCCTATGACAGATCCTTTTGGCAGCACTTCTGA
 TGCTGTTATTGACAAAGCTGATGTTGCTGTTGAGAGTCTCATACCTGGACTGGAGCCACCTGTTGCTCAG
 CGCCTCCCATCTCAAACGGAATCTGTGACCTCGAACCGCACAGACTCTCTCACGGGGGAAGACTCTCTGC
 TTGACTGCTCTGCTTTCTAACCTACTGCTGGCCTTCTGGAGGAGTTTGGCCCATAGCACTCTCTGC
 TCCCACTATAAAGCTGCAGAAGATAGCAATCTCATCTCAGGTTTTGGTGTGCTGAGGGCTCCGAAAAG
 GTGGCAGAAGATGAGTTGACCTATTCTGTACTAATTACCAAAAACACACAAGGTGGGCACTCTAGGA
 ACAGCAGTGGGAGCTCTGAGTCCAGTCTCCCAACCTAGCCAGGCTTTGCTGCTGGTGGATCAGCTCAT
 AGACCTG**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001040106
Insert Size:	2880 bp
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).
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:	<ol style="list-style-type: none">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:	<u>NM_001040106.2</u> , <u>NP_001035195.1</u>
RefSeq Size:	19363 bp
RefSeq ORF:	2880 bp
Locus ID:	269774
UniProt ID:	<u>Q3UHQ</u>
Cytogenetics:	6 37.75 cM
Gene Summary:	<p>Regulates clathrin-mediated endocytosis by phosphorylating the AP2M1/mu2 subunit of the adaptor protein complex 2 (AP-2) which ensures high affinity binding of AP-2 to cargo membrane proteins during the initial stages of endocytosis. Isoform 1 and isoform 2 display similar levels of kinase activity towards AP2M1. Regulates phosphorylation of other AP-2 subunits as well as AP-2 localization and AP-2-mediated internalization of ligand complexes. Phosphorylates NUMB and regulates its cellular localization, promoting NUMB localization to endosomes. Binds to and stabilizes the activated form of NOTCH1, increases its localization in endosomes and regulates its transcriptional activity (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) is the longer transcript and it encodes the longer protein (isoform 1).</p>