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Product datasheet for MC222351

Aak1 (NM_177762) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aak1 (NM_177762) 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:

>MC222351 representing NM_177762
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGAAGTTTTTCGACTCCAGGCGGGAGCAGGGGAGCTCTGGCCTGGGTTCAGGCTCCAGCGGAGGAG
GGGGCAGCAGCTCAGGCCTGGGCAGTGGTTACATCGGAAGGGTCTTCGGCATCGGGAGGCAGCAGGTCAC
CGTGGACGAGGTGTTGGCGGAAGGTGGATTCGCTCTTGTCTTTCTGGTGAGAACAAGCAATGGGGTGAAA
TGTGCCTTGAAACGTATGTTTGTCAACAATGAACATGACCTCCAGGTGTGCAAGAGGGAGATCCAGATCA
TGAGAGACCTATCAGGGCACAAGAACATTGTGGGCTACATTGATTCTAGTATCAACAATGTGAGCAGCGG
CGACGTCTGGGAAGTTCTCATTCTCATGGACTTCTGCAGAGGAGGCCAGGTGGTAAACCTGATGAACCAG
CGTCTCCAGACAGGCTTCACAGAGAATGAAGTGCTGCAGATATTCTGTGACACCTGTGAAGCTGTGGCCC
GCCTGCATCAGTGCAAAACTCCCATTATCCACCGGGACCTGAAGGTTGAAAATATCCTCTTGCATGACCG
AGGCCACTATGTCTTGTGTGACTTTGGAAGTGCCACCAACAAATTCCAGAATCCACAGGCCGAGGGAGTC
AATGCAGTAGAAGATGAGATTAAGAAATACACAACGCTCTCCTATCGAGCCCCAGAAATGGTCAACTTGT
ACAGTGGCAAAATCATCACTACGAAGGCAGATATTTGGGCTCTAGGCTGTTTGTTGTATAAATTATGCTA
CTTCACTTTGCCGTTTGGGGAGAGCCAGGTGGCGATTTGTGACGGAAGCTTCACAATTCCTGATAACTCT
CGTTATTCTCAAGATATGCACTGCCTTATTAGGTATATGTTGGAACCAGACCCTGACAAAAGGCCGGATA
TTTACCAGGTTTCATACTTCTCATTTAAACTACTCAAGAAAGAATGCCCCGTTCCAAATGTACAGAACTC
TCCCATTCCTGCAAAACTTCCTGAACCAGTGAAAGCCAGTGAAGCAGCTGTGAAAAAGACCCAGCCAAAG
GCCAGACTGACCGATCCCATTCCCACCACAGAGACTTCAATCGCACCCCGCCAGAGGCCTAAAGCTGGGC
AGACTCAGCCAAACCCAGGCATCCTTCCCATCCAGCCAGCCCTGACTCCTCGGAAGAGGGCCACTGTTCA
GCCCCTACCTCAGGCTGCAGGACCCAGCAATCAGCCTGGACTTCTACCCAGTGTTTCCCAACCTAAAGCC
CAAGCCACACCCAGTCAACCTCTTCAGTCATCTCAACCCAAGCAACCACAAGCTCCACCCACCCCACAGC
AGACACCTGCTACCCAGACACAAGGTTTGCCCACCCAGGCCCAGGCCACTCCCCAGCACCAGCAGCAACA
CCTCCTCAAGCAACAGCAGCAACAGCAGCAACAGCCTCAGCAGCCTACAGCACCACCACAGCCTGCAGGC
ACCTTTTACCAGCAGCAGCAGCAACAGCAGCAGCAGCAGGCTCAGACTCAGCAGCAGATTCAAGCCCCAG
TGAGACAACAGCCAAAAGTTCAGACCACTCCACCTCCAACCATCCAGGGACAGAAAGTTGGATCTCTCAC
TCCTCCATCATCACCCAAAACCCAACGTGCTGGGCACAGACGGATTCTCAGTGATGTAACCCACAGTGCA
GTCTTTGGGGTTCCTGCCAGCAAATCAACCCAGCTGCTCCAGGCAGCTGCAGCTGAGGCCAGTCTCAATA
AATCTAAGTCTGCAACCACCACTCCCTCAGGCTCTCCACGGACTTCACAGCAGAATGTCTCCAATGCTTC
AGAAGGCTCCACATGGAATCCTTTTGATGACGACAACTTCTCCAAACTCACAGCTGAAGAGCTGCTAAAC
AAGGACTTTGCCAAGCTTGGGGAAGGAAAGCTGCCTGAGAAGCTTGGTGGCTCTGCAGAGAGTTTGATCC
CAGGCTTCCAGCCAACACAAGGAGATGCCTTCACCACTCCTTCTTTTTCTGCTGGAACTGCTGAAAAAAG
GAAGGGGGGCCAGGCTGTGGACTCTGGCATCCCACTTCTAAGTGTGTCTGATCCCTTCATTCCTCTTCAA
GTACCTGATGCTCCAGAAAAACTAATCGAGGGACTCAAATCTCCTGACACTTCTCTTCTGCTCCCTGACC
TCTTGCCTATGACAGATCCTTTTGGCAGCACTTCTGATGCTGTTATTGACAAAGCTGATGTTGCTGTTGA
GAGTCTCATACCTGGACTGGAGCCACCTGTTGCTCAGCGCCTCCCATCTCAAACGGAATCTGTGACCTCG
AACCGCACAGACTCTCTCACGGGGGAAGACTCTCTGCTTGACTGCTCTCTGCTTTCTAACCCTACTGCTG
GCCTTCTGGAGGAGTTTGCCCCCATAGCACTCTCTGCTCCCACTCATAAAGCTGCAGAAGATAGCAATCT
CATCTCAGGTTTTGGTGTTGCTGAGGGCTCCGAAAAGGTGGCAGAAGATGAGTTTGACCCTATTCCTGTA
CTAATTACCAAAAACACACAAGGTGGGCACTCTAGGAACAGCAGTGGGAGCTCTGAGTCCAGTCTTCCCA
ACCTAGCCAGGTCTTTGCTGCTGGTGGATCAGCTCATAGACCTGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_177762

Insert Size: 2637 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:	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_177762.6, NP_808430.2
RefSeq Size:	19120 bp
RefSeq ORF:	2637 bp
Locus ID:	269774
UniProt ID:	Q3UHJ0
Cytogenetics:	6 37.75 cM
Gene Summary:	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] Transcript Variant: This variant (2) lacks an alternate exon in the 3' CDS, compared to variant 1. The resulting protein (isoform 2) is shorter when compared to isoform 1.