

## Product datasheet for **MG222816**

### Alms1 (NM\_145223) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Alms1 (NM_145223) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Alms1
Synonyms:	bbb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222816 representing NM_145223, <b>codon optimized</b> . <b>Due to the complexity of NM_145223, the ORF clone is codon optimized for mammalian Expression.</b> <b>The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.</b>

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGAGCCTGAAGACCTGCCCTGGCCTGACGAGCTTGAAGAAGAGGAGGAGGAGGAGGAGGAGGAGGGAG  
AGGAAGAAGAGGGGAAGAAGGAAGTAGAGAATGCCTCAGCAGCAGCCACCGAAGAAGCACTACGAGCGA  
GGAGTCAGGCCGGCTTGAGGAATTTGAGGAAGCTGGCCCTGACTTGACTTCAATTACGAGTCCCAGCGG  
CAGGAGAGTTCAGACGAGGAAGAGGACGAGCTCGCAAAGGCCGTTGCAAGCCACCCCTGACAGGCCAG  
GCTCTGCCTTTAGTCTGCCACCACCTACACCTCCACCCTCCACCTCCACTGTCCCACGATTGCGCTA  
TACACCCGTAGAGCACCTGGGCAAAACCGAGGTCTACCCCTGACTTGCAGGGTCTGGCAGCAGTCATCC  
TACCAGGATAACTCAAGAGCACAGTTTACAGTAACAGCAGCACCATGCTCCTGGAGACAGGTGTACGCTGGG  
GGAGTGAAGAAGACCAGAGGACCGAATCCTGGCACTGCCTTCTCAGGAAAGGGACAGCAGCCAGACCCCT  
CGCTATGAGTCAGACCGAGATCGGAAGGGTTCGAGGGCAGAGAAGTTCCCGACCTGCCTCTCAGGAAGGT  
GGCCTTCTGCCAGTCCAGTGCCTCGAAAAGCCTAAACTGAATGTGCTGTGCTCCCCTTGCTTG  
TGATCCAAGATAACTTTGCCGCCCCGACCTGCCACTGCTCACATGCCTGATACAAGATCAGGAGGAGGT  
GGAACCAGACTCTGTTCAGCAGTCAGAGCTTGTGTTTGCGCCCTGCGAGGAATCCCGATAAGAGC  
GAGGACAGCGAGTGGCTCGCCCGGCCAGCGAGGTGTCTGAGGCGCTCATCCAGGCTACCTCAGAAACCT  
CCTCTGATCTCGCAATTCCTGTTTCTCCATATCCCAGCACCCCTCTGACAGAAGGTCTGCAGGGCAAAGC  
AGAGTCCGGCGTCTTACCGGTGCGGCGACGCCAAATATAGCTCCTGTACGAAAATCTGGCGCCCAA  
AGTGAACGCATCGCTGTGCTCAAAGAGAAGTGGGGTGTAGTAACCTGGGCATCAGTCAGGCTTCTCAA



GTAGCCTGCCATCCTTTGTCCCCAGGAGCCACTAGTGAGCCTGAATATCACTCTTCCAATCTGCGGAT  
 GCTTCGAGTTAGTCCCGACACACTGTTGACCACACACACGCACAGCGCAGGAAGCGCGGATCAGAAGATC  
 GCGCGCGCGTGGTGTCCAGCGCCTACTCCCAGGAAATTAACCAGGGAGCTTTCACCAAGAAGAGCTGC  
 CAGACCGGCACCTCAACGAAGAGATCCGGAAGGTGAGTCCAGCTCTGCGAACCGTGGACAGAAGCCAGA  
 AATGCTGCCTGTACAAAGCAGCTCTTAGCAAGGGTATGAAATCTATTTTACCAGCACCTGTGTCC  
 CATGGTACCAAGGAAAGGAGCCCTGAGCGTGAGCGCTGTGTGCGGATCTGCCGAAATAAGGCATTCC  
 ACCAGCTGAGCACCTTGTCTGATAGTCTTACAGAAGAAACCTGGCCTGTCAGCGTAATCCCAGGTCT  
 GGGGAACCAGAAGACACCGCTGCCAAGTGTGTTAGCCTGTCTATTCTACCGAGGAAAGAACCTGCCA  
 GAGGATGTTGTGAAGTTTCCACTGATAGTGGCAGCGCATAAGAAGGCTGACATTCTGACAGCATCAA  
 GCAGGACCTATCAACACAAGATGAAGCCCGCAACATCTACCATCAGGAACCTTCTGATAGCGGGTTCC  
 AATCGGCACTAGGAAGGTGGCTTTGAGTCAGGGCCAGCCGACAGAAATCCGGGGTGTCTACCCATAT  
 GGTGAAATGCCAAGTGTCTTCTATCAGCAGGGCTCCCTGACCGCACTCTGCTAAGTCTCCACAAAA  
 CGTTTATCCCAGGACCAGCTGACCAGAAGACCGACCTCTACCTGTGCCTCCACCTCTCCAGTACGC  
 TGAGAAGCCAGTTTCCCCTTACCAGCTTACACTTCTGGAAGTCATCTGCCGGAGGATGTGTTCAAAGCT  
 TCAAGCGTATGCAAGTCAAGCGACGAACCTCTGGCATCACAGCCCTCACGTCTGCTTCATATTCATACA  
 AGGGTAGGCCAACTCCTCATACCAGCAGAAATTTCTGATAGCCACCTCAATGAGGAAGCGCAAAAAAT  
 TCTGGGAACAACCGCACTGTGGATCAGAAGACTGTTACCCCCACCATGAGCTCCTCTTTTGGAAAAAG  
 GAAAAACCTCTATCTTCTACCAGCAGACATTGCCTGACGGCGCCTTTCAGAGGAGGATCTGCAGGTGT  
 CCGCCGTGCCGTGGCCGGCTGACCAGAACATCGCCATTCACAGTACAAAGCGCTGCCTTCAGCCAACG  
 GGAGAAGCCTAGGATTTTTACCAGCAGACGCTGTCTGTTGACAGACTGCCTGGCAACCACTTAACGTG  
 CTCGGAAGTACGGACCCCGAGACCAGAATACAGGCGCTCCACCGTTACGCCTCCAGTTACTTCCCAG  
 GAGAAGAGAGCATCATTTCTACCAGCCGGATTTCTGGTAATACCCTCTCTGCGATGAGCTTTAAGGT  
 CCTTAGGATTTCCGGTTCAACAGAGCAGACCAATGTAACACTGGAAGCTTTCAGCTATTCGTGGGC  
 GAGAAAAGCATTATCTTCTACCACCAAGCTCTCCCGATGGGCGCTTGCCTCAGGAAGCCTCCCTGCAC  
 CAGCAGATCTGAACACAGGAGAGCCACCTATGTATTTGGCCTCATGTTTCAAGTGGGTGTAACCTATAAT  
 ATTTTACCAGCAGCCATGTCCGATTACAGCGCACAAAGGGGCATAAGGAGAGTGATGTCCCTGTCTCT  
 ACCGATCAAAAGACTGGCATTGTACGGTTCACAGCACTTACAGTCTACATTGGCAGACGGACTGTAT  
 CCTATCAGAAGGAGTTCCTCGATCTGTCCGAGAAAGCCCTCAAAGTCTTGGCGATGTGGGTAGTACTGA  
 GCAAAAGACGCAGATCCCGTGTGTCTTCTGCCCTTCTCCACAAGGAAGTCCCAGCGCCTATCAGGAA  
 GACCTTCCGGATCTCACCAGGAGCCATTGCAGATACTCGGAGTGTCCGAGGAGTAAGCTTTCATCTT  
 ACCAACGAAAAC TGCCCGATCACATCGAAGTGTCTTAAAGTCTGTTGGGAGTGGTCCGCAGACAGAAA  
 GACCGGCGCGCAATCGTAAGCTCCTCACGGGAAAAGAGTTCAGGATTTTCATCAGCAGGAACTGCCCAAT  
 ACCGGGGCGATGCAGTTGACGCTTTTCATCTGAACAGTGGTGCAGGAGGTAAGGAAGGTACAGACAC  
 CCGGCGCCCTGCCGGGCCCTTCTCTCACACTTTCACAAAGAAAAGCTCAGTACTACAAAAGGCCCTC  
 CCCTCATAGGGACCTGACAGAATCAAGCCTGAAGGCCCTCCACCGTGCCTGGGCTGTCTGACCAGAAAAAG  
 AAGCCAGCGGTTAGCTCTGGTTTCTGCCTGCACAAAGAAAAGCACAGATCAGCGCGTCCGCCCTCTCA  
 ACTGCCAGACAGCCGAGCTTCTCACTGTTACACAGCGCAGCTGTCTGCACCGAGAAGACCCCGCAATCTC  
 AACAGTGATCAAACCCGATGACCAGAAGATTCCGCTGCCAACCCTTTCACCGCTCCAGCGACCCAGAAA  
 GTGAAACCTGTAATCTTTGTGCAGAAACAGCTGCGGGACCGAGATCAGAGCGAGGATATTCCTAAGATCT  
 CCACAGTTTCTGAGCCTACTGTGGTGAACACCGTCTCCCTGTGCTTCTGCCAGGTAGCTATAGTCACAG  
 AGAGAAGTCTGACTCATTCTATCCCCAGGAATTGCCCGATGGGCATTTGACTGAGGTGGACCTGAAAGTG  
 TCCTCTGGGCTGGGTGAGGCTGATCAGATCTCCGGCTTGCCACTGGGATTCCCAGAACCTACTCTCATT  
 CAGAGAAACCAACTCATTTCCGAGCAGTCCAGGAACCTATGGATAATCTGAATTCCTCTGAATCCTC  
 TTGTCTGTCCGTGGATTCCATGCCGTTGAATAGTCAAATCGATGACGGAGTTATCATCTGTAAGCCTGAA  
 TCCTTGGGATTTGCCAACGCCGGATGTGAGGAGATGCAAAACATCGACCGGGGTCAGAACGCTTAAGG  
 AGATACAGACTCTTCTCATGGAAGCCGAGAACATGGCTCTGAAGAGATGCAACTTTTCCGTGCCACTGGT  
 GCCCTTCCAGAGAGTAAACGATGTAAGCTTTATTCGCAGCAAAAAGTCTGTTTGTAAAAGAGAGCTCA  
 ACAACAGACGTGTACTCAACGGGAAAGTTTTGTGGAGGAAGTGCCCCACATCGAGTACGTCCAGAAAAG  
 ATATTGGAACCCAGACGAATCTGAAATATCAGCGAGGCGTCCGCAATTGGGAGTTTATCTCATCCGCCAC  
 CTTCCGGTCCCCATTGCAGGAAGCGGAGGGGACCAGCAATGGCTTATGACGAAACATTAGGCAGTAT  
 AAAGCTGCTCGAAGCGTGTGAGATCAGAACAGAAAGGTTGTTCAACCGTATCGGAAACAAGATGATAA  
 TTCCCATGATGACGATTATCAAGTCAGACAGCTTCTGATGTGAGTGACGGATGCTGCTCTGGGACAA

TAACCTTCCTGAGAGCCTGGAGTCCGTGTCCGACGTGTTTTGAATTTCTCCCATACACCAGCCCTAAG  
 ACCTCTATCACCGACTCTCGCGAGGAGGAGTGGCTCAGCGAGTCTGAAGACGGCTATGGGAGCACAGACT  
 CACTGGCCGCCATGTGAAATATCTCCTCAGTGTGAGACTAGTCTGAATCAGGCTAAACAAATACTCAA  
 AAACGCCGAGGAAGAAGAGTATAGAGTCCGACCCAAGCTGGAATTTGAAGTTCAACCTGGGACGCGAC  
 CGCGGCTATAGTATTTCCGAGCTGAATGAGGATGATAGGCGGAAGGTCGAGGAAATAAAGGCAAACTGT  
 TCGGACATGGCCGGGCCACCCACATGAGTGAGGGCCTCGCTCCCCACAGGGGATCGGGTGTCTGCCTGA  
 GGCCGTGTGTAGTCGCATCATCATTGAGTCACACGAAAAGGGGTGTTTTAGGACGCTGACGGCTGAGCAG  
 CCAAGACCCGATAGCTGCCACTGTGCGTTCCGAAGCGTAGAACCTAGCGATCTTATTAGGGGACACAGGA  
 GTCCTTCTTCATGGAGAGGCAGACACATCAACCTGTCTCGGTCCATCGAACAGTCAAACCCTTGCTTTAA  
 AGTGGGAAGTAGTTCCAGCTGCAGTCTCACCCCCCTCCAGAAGCTTCTCCAGATGATATCAAGATT  
 TCTAAAGGAGTCGGCATGCCCGTTCACGCATATATGGACCCCAGCCGAGCGAACTTGTGCAACCCACCT  
 GTGTTCCCGCCAAGGAGATGGATTTTCTTCTTCATCTCAGATCCTTCCGCCGAACCCAAGAAGCAATT  
 TACTACTGCCATCACATTCAGTAGCCATGAGCACTCCGAGTGTATCAGCGATTCTAGCGGCTGTAAGTT  
 GCGGTGACAGCCGACAGCCAGTGTAGTGGCCCTAGCCTTGGAGTTTTCAAGCCCCATATCCAGAGGAGC  
 AGATATCTCCTCGGGACCTGAAGCAGAAAACCTCTTTCAAAGCTCACTTGAACGCCACGGCTCCACGCC  
 CGTCACCATCCTGGCGGATGGTTCACGCCAAAGGCAAAAGCTGCCGGTGATTTTGAACATAGCCATCAG  
 AAGGAGAAGCTGTTGCAGCGGCTCGGATTCAAAGTGTCCATTCCGAACCAAACGCTCTACCAATGTCT  
 CAAATTTCAAGGGGGTCCAGTTTTCTGGCAAGGATACCATCGTCTCCAGGACAAGCTGACCAGCACCGT  
 AGAGGTAAGGAAAAGAAGCTGACAGTAACGCCTGACCTGCCCTTGTATTTTCTGGAGCAACCCGGAG  
 CTGTTCGAAGAGAGTCACACTCCTCATACCGATCTTCAAATGAGGAAATACCCGAGCCCTTCTGTCTCTG  
 AAATTGCATCCCGCATCTTTCTGGAACAGCCGAAGCTGAGCGAGCAGTCAAAGCTCCCCACGTCGATAG  
 AGAAATCAGAGAGGATCATTCTTTTTCCAAAATGCCAGGATTATATCGTGGCTGACCCCTCCCCAGAT  
 TTCCCAGACCAGCAGCAGTCAAACCACCAGAGTGGTCGGACACACTAGAAAAGCAAAACTACTGCTCA  
 GCGAAGGCCAAGATTACGAGCTGGAGGAAGTCCAACACATTCGCGAGAGCTACTTCAAGTAACATGGTCAA  
 CGTAGAGGCTAAAGTGAAGCAGCGTATCAGTCACTGACCCGACCACTGTACTGCTGCCAGCACTCCT  
 CCAAGCAACAGAAAAGCTCTCTCCTGCGTCCGGATCACCCGTGTGCCAAAAACCTCTCAAAACTGGACA  
 GCGGGACATTGGGCGAAAGGTTCCATTCTTGTATCCCGTAGTAAGACCCGGATCAATAGCGAGTTCAA  
 TAGCGACCTCAGAATCATTAGTAGCCGCTCACTCGAGCCAACAGCAAGTTGCTGACCTGCAAGCCAGTC  
 GCTCAGGACCAGGAGAGCCTGGTTTTCTGGGACCCAAGTCACTTTGGACCTCAAAGTCGCGCAATCCT  
 CCCTGCCTGACTCAAAAACAATCTTTCAGGACCTGAAGACCAAGCCCCCTCAAAATTCCAAATTTGTGAC  
 CAGCCGCCAGACCAAGTAAACATCAGCCACCTGGAGGGTACTCTAAGCCAGAAGGGACACCAGTGAGC  
 GCCGATGGCAGCCAAGAACAGTCTAAAGTGTATTACCAACAAGCTTCGTAACACTGTCTCCGATGCGA  
 TCAACCAGATTACCACAGAATCCCTGAAAAGACCACGTTTTCTAGTGAATCTTTATCCATGCAGACGA  
 TCGAGGCCAAGGAATCCTGGATCCCATGGCTCAGAAGCCAAGCAGATTCCGATCCAGCTCCAGCGTCCAG  
 CAAATACCTGCAAGTCAATGGGAAGGATGCACAGCCGGTCTCTTGCCATATAAACCTCCGGCAGCTCAA  
 AAATGTATTATGTCCCGTCTCTCAAAGAGTGCCTCATATCTCGATAGTAAAAGTGATACTACCGTGGG  
 GAGTAGCCATAGTGGATCCAACGACGCAATCGCTCCGACTTCCCGCCTCAGATGTTGGGCACTCGGGAC  
 GATGATCTCTAACACTGTCAACATTAAGCACAAAGGAGGAATCTACTCAAAGAGGGCTGCAACAAAGG  
 GCAAGAACCCCTCTCAGAAAGGGGATGCTGCAGCTCCCGTCCAGATGCCATCACTTGGGACGAGAACGT  
 CCTGGATGAAAACCAAGAGGAGGTAATTAGCCGCGGAGTAGTTATTAAGATGGCGGGCCAGAGGAGATG  
 TCTTCACTTGAAGGACCTGGGTGGCCCTCAGACATCACTGTTGAGGACAGGAAAACAGAGAACCTTC  
 CCGACACGAAATCAATCAACAGAAAGGAGGGCAGCCTGGAGATAGAGAGTGAATGTCACAGCGCATTGCA  
 AAACACCGCCACAGCGTTTTCCAGATCCGCCAAGTTCTACTTTCATCACCCAGTCCACCTGCCACATGAA  
 CAGGACTTCTGTCATGAGTCCCTTGGTCGGAGTGTGTTTCATGCAACTCTTGGAAAGATTTTTCCACC  
 ATCACTCCGACATAGCTGCCTGCCTCCCCTGGCCCTCATCCGACAAGTTGGATAAGACCAAGATGGA  
 TTACACCCGAATCAAGTCACTGAGCATTAAATTTGAATTTGGGCGAGCACGAGAAGATTCACTATAAAG  
 AACAGGCGCGGGACCCAAAGGCAACGGCAGGCCAACGAGCAGAAGAAGGATCAAAGGTGACCCAG  
 AGTTGACTACAGAATGCCCTGTACGCTGAACGAAGTGTGGAACCGCTACCAGGAAAGACAGAAACAGCA  
 GAATCCGAGCGGGGCTTGCATACAAAGGAGCTGTATTGGTTGAACGGTTGGACAGGCTGGCCAAGCTT  
 CTGCAAGACCCTATAACCCACAGCCTTCCGCGCTCCGAGAGTGCCCAGGATGATTCTAGAGGGGGTCATA  
 GAGCCAGAGAAATGGACGGGGCGCCGACAGAGAAGCAAGGGAAGCAACATCGGAAGTGGTCCAAGAG  
 TCTGGAGAGGGGACAGTCTACAGGGGACTTCAGAAAAGTCAAAGTGTTTTTCCCCACACCAGGGTGGCAAG

TCCAGTCAGTTTAAAGATCGAGCAGATTAAGCTGGATAAGTACATTCTGAGGAAAGAACCTGGGTTTAAACA  
 ATGTATCTAATACGAGCCTTGATAGTAGACCCAGTGAGGAATCTGTGAGTTTGACAGATTCTCCTAATAT  
 CTTCTCCAGTACCGACAGTCCGGTGGATTACAGACGTCTTGACCCCTACTGACCGAGATATGCCCTTAAC  
 GAGAGGTCCTCCTCCATCTACTATCGATACAGTCAGGCTCATCCAAGCCTTCGGGCAGGACAGGCTGT  
 CTCTGAGTCCCAGAAGAATTAAGTCTACTCCACCGTCACTAGCCAGCGAAGGCGCTATCTTGAACAGCC  
 TTGTAACACAACCGGAAGGCCCTGAATACTGCTTGTCCACAGATGACCTCTGAGCATAGTAGGGCAGCG  
 CACATTCAGGTCGCAACACATGACCTCCTCCGATTCCGTTTCTCACCCGGCTTTTGTGTCCCTCG  
 ACTCTGCCCTGTCTAACGAAGAGACTGTGAGGATGGTATCCAAGGGTGTCCAGGCCGTAATCTGGAGAT  
 TGTGCGCCGGCGTAAAAAGTATACCCAAGACGTAGGCGTCACCTTCCAACCTCCATCTAGCAGTGAAGCC  
 AGGCTGGAGGAGGACAGTGATGTCACGTCAAGCTCTGAAGAAAAGGCCAAGGAAAAAAGTTCTGTCCA  
 ACTACCTCCAGACCAAAAACCTCAGAAAGAACAAGCCCAATCCTTGCCTGGAGTGTCTTGGTTTGTCCC  
 AGTGGAGTCTGGACAAAGTGGGTCTAAGAAGGAAAACCTGCCAAAAATTTACCGCCTGTATAAGCTGG  
 TTTGAGCCTGTTACAAAACCAAGCCCTGGAGGGAACCGTGCAGGGAACAGAACTGGCAGGCACAGTGCA  
 TGAAGTCAAGGGCAGTCTCGGAGTCCCGGCAGAGATCCGGTCAGGTTTCACTGAGGCCCTTCGTCCG  
 CGCCACACTTCAAGAGTCACTGCAGCTTATAGACCAGACTTTATCTCTCACAGCGGGGAACGAATAAAA  
 CGCCTGAAACTTCTGGTGCAGGAAAGAAAGCTGCAGAGCCTGTTCAAAGTGAGAGGGAAGCCCTGTTTC  
 ATTCGCCCGCCCACTGCCCGGCGGGTCTGCTTGCAGTCCAGAAAAAATAGCCCAATCGGTAAGAAAGA  
 GATGATTCAGCGGACTAGAAGGATTTATGAACAACTCCCGAGGTAAAAAGAAGAGGGAGGAGGAAAAAG  
 AGAAAACTGAATACAAGTCTTACTGGCTTCGCGCACAGCACTATAAGATGAAGGTGACAAATCACCTGC  
 TCGGCAGAAAGGTACCGTGGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG222816 representing NM\_145223  
 Red=Cloning site Green=Tags(s)

MEPEDLPWPDELEEEEEEEEEEGEEEEEGKKEVENASAAATEEAL TSEESGRLEEFEEAGPDLDFNYESQR  
 QESSDEEDELAKAWLQAHPDRPGSAFSLPPPTPPPPPPPLSPRLRYTPVEHLGKTEVPLTCRVRWQSS  
 YQDNSRAQFSNSSTMLLETGVRWGSEEDQRTESWHCLPQERDSSQTLAMSQTEIGRVEGTEVPLPSQEG  
 GLPAQSQCPGKKPKLNLVLCSPLLVIQDNFAAPDLPLLTCLIQDQEVEVPDLSLFQOSELAFAPLRGIPDKS  
 EDSEWLARPSEVSEALIQTSETSSDLANSCFSISQHPLTEGLQKKAESGVLTRCGDAKYSSLYENLGAQ  
 SERIAVLQREVGCSNLGISQASPSLPSFVPQEPTEPEYHSSNLRMLRVSPDTLTTHTHSAGSADQKI  
 GAAVVSSAYSQEIKPGSFHQEELPDRHLNNEIRKVPALRTAGQKPEMLPVQSSSYSKGMSIFYQHPVS  
 HGHQKKEPLSVSAVCGSAGNKAHFHQLSTLSDSLLTEETWPVSVIPGLGNQKTPLPSEFSLSYSHRGNLP  
 EDVVKVSTDSGSAHKKADILTASSRTYQHKMKPANIYHQELPDSRVPIGTRKVFESGPAQKSGVSHPY  
 GEMPSVFYQQLPDRHSAKSPTKTFIPGPADQKTDLSPVPPTSSSHAEPVSPYQLTLPGLSHLPEDVFKA  
 SSVCKSSDELSGITALTSASYSYKGRPNSSYQKFPDLSHNEEAQKILGTTGTVQKTVPTMSSSFLQK  
 EKPSIFYQQLPDGGLSEEDLQVAVPWPADQNIPIPTVTSAAFQREKPRIFYQQLSVDRLPGEPLNV  
 LGTSGPPDQNTGAPTVPSSYFPGEEESIFYQAGFPGNLTSAMSFKVPRI SGSTEQTNVTTGSSSSYSVG  
 EKSIIFYHQALPDGRLPQEASPAPADLNTGEPMYLASC SVGVKPIIFYQPMDSQRTKGHESDVPGP  
 TDQKTGIATVHSTSQSYIGRRVTSYQKEFPDLSEKALKVLGDVGSSTEQKTQIPVVSSALLHKEGSPAYQE  
 DLPDLTEEPLQILGVSEEVSSSYQRKLPDHIEVFLKSVGSGSADRKTGAQIVSSSREKSSGFHQQELPN  
 TGGDAVDAFHPEPVVQEVKRVQTPGAPAGPSSSHFHKEKLSDYQKASPHRDLTESSLKASTVPLSDQKK  
 KPAVSSGFCLHKEKHEISASALLNCQTAE LLTVTQRSC LHREDPAISTVIKPDQKIPLPTTFHGS SDQK  
 VKPVI FVQKQLRDRDQSEDIPKISTVSEPTVVNTVLPVLLPGSYSHREKSDSFYPQELPDGHLTEVDLKV  
 SGLGQADQISGLPTGIPGTYSHEKHQLISEHVQELMDNLNSSESSCLSVDSMPLNSQIDDGVIICKPE  
 SGLGANAGCEEMQIDRGSKTLKEIQTLLEAENMALKRCNFVSPVLPVFRD VNDVSFIRSKKVCFKES  
 TTDVCTQRESFVEEVPHEIYVQKDIGTQNLKYQRGVGNWEF ISSATFRSPLQEAGTARMAYDETFRQY  
 KAARSVMRSEPEGCSTGIGNKMIIPMMTIKSDSSDSDGCCSWDNNLPESLESVSDVFLNFFPYTSPK  
 TSITDSREEEWLSESEDGYGSTDLSAAHVYLLQCETSLNQAQKILKNAEEEEYRVRTQAWNLKFNLRD  
 RGYISIELNEDDRRVEEIKAKLFGHGRATHMSEGLRSPQIGCLPEAVCSRIIIESHEKGCFTLTAEQ  
 PRPDSCHCAFRSVPSDLIRGHRSPSSWRGRHINLSRSIEQSNPCFKVGSFQLQSHPPFQKLLPDDIKI  
 SKGVGMPVHAYMDPQSELVEPTCVPAKEMDFPSSQILPPEPKKQFTTATFTSSHEHSECI SDSSGCKV

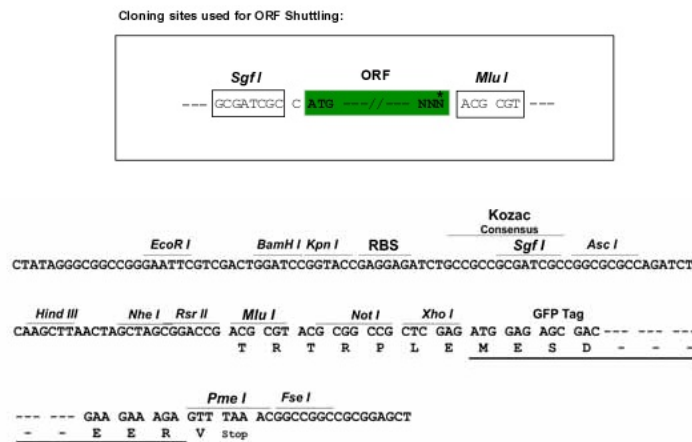
GVTADSQCSPSLGVFKPHIPEEQISPRDLKQKTSFQSSLERHGSTPVTILADGSRQRQKLPVDFEHSHQ  
 KEKLLQRLGFKVSHSEPNVSTNVSNFKGVQFSGKDTIVSQDKLTSTVEVKEKNVTVPDLPSCIFLEQPE  
 LFEESTPHTDLQMRKYPSPSCPEIASRIFLEQPKLSEQSKAPHVDREIREDHSFFPKCQDYIVADPSPD  
 FPDQQQCKPPDVVGHTRKQNSLLSEGQDYELLEVQHQPQSYFNMVNVEAKVSDAISQSAPDHCTAASP  
 PSNRKALSCVRITLCPKTSKLDLGERFHSKTRINSEFNSDLRISSRSLEPTSKLLTCKPV  
 AQDQESLVFLGPKSPLDLQVAQSSLPDSKTIQDLKTKPPQNSQIVTSRQTQVNIHLEGYSKPEGTPVS  
 ADGSQEYSKVSFTTSFGKLSDDAITQITTESPEKTTFSSEIFIHADDRGQGILDPMAQKPSRFASSSSVQ  
 QIPASHGKDAQPVLLPYKPSGSSKMYVPLLKRVPSYLDKSDTTVESSHSGSNDAIAPDFPPQMLGTRD  
 DDLNNTVNIKHKEGIYSKRAATKGNPSQKGDAAAPVQMPITWDENVLDENQEEVISRGVVIKMGAPPEM  
 SSLEKDLAGPSDITVQDRKTENLPDTKSIKQKEGSLEIESECHSAFENTAHSVFRSAKFYFHHPVHLPE  
 QDFCHESLGRSVFMQHSWKDFHHHSGHSLPPPGSSDKLDKTKMDYTRIKSLSINLNLGEHEKIHTIK  
 NQARDPKGKRQANEQKKDQKVTPELTTECPVSLNELWNRVQERQKQNPSPGACDTKELSLVERLDRLAKL  
 LQNPITHSLRASEAQDDSRGGHRAREWTGRRQKQKQKQHRKWSKSLERQSTGDFRKSQVFSHPQGGK  
 SSQFKIEQIKLDKYILRKEPFGNNVSNLSDSRPSEESVSLTDSPNIFSSDSDSPVSDVLTPTDRDMLN  
 ERSSSISTIDTVRLIQAFQDRLSLSPRRIKLYSTVTSQRRRYLEQPCCKHNRKALNTACQMTSEHSRRR  
 HIQVANHMTSSDSVSSPGLLSLDSALSNEETVRMVSKGVQAGNLEIVAGVKKYTQDVGVTFPTPSSEA  
 RLEEDSDVTSSEEKAKEKFLSNYLQTKNLRKNKPNPCAGVSWFVPVSESGSGSKENLPKIYRPVISW  
 FEPVTKTKPWREPLREQNWQAQCMNSRGSGLGGPGRDSGQVSLRPFVRAATLQESLQLHRPDFISHGERIK  
 RLKLLVQERKLQSLFQSEREALFHSARPLPRVLLAVQKNKPIGKKEMIQRTRRIEQLPEVKKKREEEK  
 RKSEYKSYWLRQHYKMKVTNHLLGRKVPWD

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:**

NM\_145223

**ORF Size:**

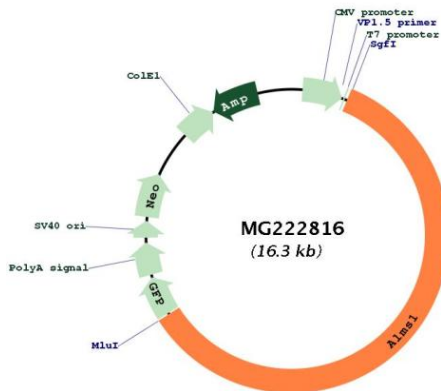
9753 bp

**OTI Disclaimer:**

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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_145223.2</a></u> , <u><a href="#">NP_660258.2</a></u>
<b>RefSeq Size:</b>	10005 bp
<b>RefSeq ORF:</b>	9756 bp
<b>Locus ID:</b>	236266
<b>UniProt ID:</b>	<u><a href="#">Q8K4E0</a></u>
<b>Cytogenetics:</b>	6 C3
<b>Gene Summary:</b>	Involved in PCM1-dependent intracellular transport. Required, directly or indirectly, for the localization of NCAPD2 to the proximal ends of centrioles. Required for proper formation and/or maintenance of primary cilia (PC), microtubule-based structures that protrude from the surface of epithelial cells (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG222816