

Product datasheet for **MG209066**

Cdkal1 (NM_144536) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cdkal1 (NM_144536) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cdkal1
Synonyms:	1190005B03Rik; 6620401C13Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209066 representing NM_144536
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCTTCTCGCTCTTGTGATGTACTGCTGGATGACATAGAAGATATCATATCACAGGAAGATTCAAAGC
 CACAGGACAGACAGTTCTCAAGAAAGCATGTGTTTCTAAAGTACGAAGCGGAATACCCAAAAATTTT
 GCAAGAAGAGCCAGGCCACCAAGTGACAGCACTATTCCAGGCATACAGAAAATTTGGATCCGAACATGG
 GGCTGCTCACATAATAATTCCGATGGAGAATACATGGCTGGACAGCTTGTGCCTATGGCTATAAAATTA
 CAGAGAATGCATCAGATGCAGATCTGTGGCTCCTGAACAGTTGTACTGTGAAAAATCCAGCTGAAGACCA
 CTTTAGAACTCAATCAAAAAAGCTCAAGAAGAGAATAAGAAAGTTGTCCTCGCTGGCTGTGTTCCCCAA
 GCCCAGCCTCGTCAGGACTACCTCAAAGGACTGAGCATCATCGGGGTTCCAGCAGATAGATCGTGTGGTAG
 AAGTTGTGGAGGAAACAATAAAAGGTCCTCAGTGAGGCTCCTGGGCCAGAAGAAAGACAACGGGAAGCG
 CTTGGGTGGAGCTCGACTGGATTTGCCGAAGATCAGAAAGAATCCGCTGATAGAAATCATTCCATCAAC
 ACGGGGTGTCTCAATGCTTGTACCTACTGCAAACTAAACACGCCAGAGGAAACCTGGCCAGCTATCCCA
 TTGATGAGCTTGTGGAGAGAGCCAAAGCAATCCTTTCAAGAGGGTGTGTTGTGAGATATGGCTGACCAGCGA
 GGACACCGGGGCCTATGGCAGAGACATTGGCACAGATCTCCACACTCCTGTGGAAGTTGGTGGAAAGTG
 ATTCCTGAGGGAGCCATGCTGAGGCTGGGCATGACAAATCCACCATATATTTTAGAACATCTGGAGGAAA
 TGGCAAAATCCTCAACCATCCCAGAGTCTACGCTTTCCTCCACATCCCAGTGCAGTCCGCTCTGACAG
 TGTGCTCATGGACATGAAGAGAGAGTACTGCGTGGCCGACTTCAAAGAGTCGTGGATTTTCTCAAGGAG
 AAGTTCTCGAATAACGATTGCTACGGATATTATCTGTGGTTTTCTGGAGAAACCGATCAGGATTTTC
 AAGAAACAGTGAAACTTGTGAAGAGTACAAATTTCCAAGCCTTTCATCAACCAAGTTCTATCCAAGACC
 CGGAACTCCTGCTGCAAAAGCCGAGCAGGTTCCAGCACATGTGAAAAAACAAAGGACAAAAGATCTTTCT
 CGGGTGTTCATTCTACAATCCATACGATCACAAGATTGGCGAAAGACAACAAGTCTAGTCACTGAAG
 AGTCTTTTACTCCAAGTTTTATGTTGCTCATAACCGATTCTATGAGCAGTTTTAGTACCAAAGAACC
 TGCATTATGGGAAAAATGGTTGAAGTCGACATTTACGAATCAGGAAAGCACTTTTTGAAAGGACAGCCA
 GTATCAGAAACCAGAGTGTATACACCATCCATCAGCAAGCCACTGGCCAAGGGAGAAGTCTCAGGTTTGA
 CAAAGGAATTCAGAAATAGGCTTGGGAATCATCCAACCGAACTTCAGACACCTGTCTGCAACTCAGCA
 TGGCTCTCGGTATTCCAGAAATGGTGTGCAGATGTCCAGTATGACTGCGCACTGAAGGTGGCTACAGGC
 CTGGCTCTCTCGCTCTCTTTTGCATTCTGGCCAGACTCTTTGCTTACAATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG209066 representing NM_144536
 Red=Cloning site Green=Tags(s)

MPSASCDVLLDDIEDIISQEDSKPQDRQFSRKHVFPKVRRTQKYLQEEPRPPSDSTIPGIQKIWIRTW
 GC SHNNSDGEYMAQLAAYGYKITENASDADLWLLNSCTVKNP AEDHFRNSIKKAQEENKVVLAGVCPQ
 AQPRQDYLKGLSIIGVQIDRVVEVVEETIKGHSVRLGQKKNKRLGGARLDLPKIRKNPLIEIISIN
 TGCLNACTYCKTKHARGNLSYPIDELVERAKQSFQEGVCEIWL TSED TGAYGRDIGTDLPTLLWKLVEV
 IPEGAMRLRLGMTNPPYILEHLEEMAKILNHPRVYAF LHIPVQSASDSVLM DMKREYCVADFKRVVDFLKE
 KVPGITIATDIICGFPGETDQDFQETVKLVEEYKFP SFLINQFYPRPGTPAAKAEQVPAHVKKQRTKDL S
 RVFHSYNPYDHKIGERQQVLVTEESFDSKFYVAHNR FYEQVLVPKNPAFMGMKMEVDIYESGKHLKGP
 VSETRVYTPSISKPLAKGEVSGLTKEFRNRLGNHPNGTSDTCPATQHGSAYS RMVLMQMSQYDCALKVATG
 LALLALLLHFWPDSLTM

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_144536

ORF Size: 1734 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_144536.3](#)

RefSeq Size: 2538 bp

RefSeq ORF: 1737 bp

Locus ID: 68916

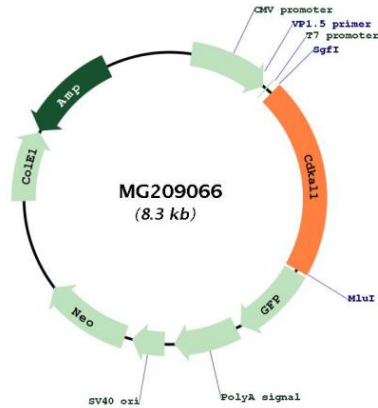
UniProt ID: [Q91WE6](#)

Cytogenetics: 13 A3.1-A3.2

Gene Summary:

Catalyzes the methylthiolation of N6-threonylcarbamoyladenine (t(6)A), leading to the formation of 2-methylthio-N6-threonylcarbamoyladenine (ms(2)t(6)A) at position 37 in tRNAs that read codons beginning with adenine.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209066