

Product datasheet for **MR231092**

Cux1 (NM_001291240) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cux1 (NM_001291240) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cux1
Synonyms:	CDP; Cutl1; Cux; Cux-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR231092 representing NM_001291240
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGCGCGCTCAGGTCGGCTCCGAGCTGCCTTCTCCAGCCGGTTCTCGAAAGCAAAGCCCCGGGG
 CCCCGCTGGACTGTAAGGAGACTGATTGTGGTTCTCGTCGCCTCGAGGGGATGGTATCGGGCTTCCCA
 ATCCGCGCGGAGCTGCCTGCGTGCCAGAGGATGCTATTCTGCCTGCCACCCCTCATCGGAACCAGCTG
 CTCGCCCTCGGGGTCTCCCTGCTAGTGTAGCTCCGCGTTCGCGGCGCCTGGACAGCCCCAGGATTCTG
 CCAGGTGGATGTTGTGCGTAGCCGGAGCCAAGTTGAAGAGAGAAGTTGATGCCACCGCAACAGTATTGGC
 AAACAGGCAAGATGAGAGCGAACAGTCCAGAAAGCGGCTCATTGAGCAGAGCCGAGAATTCAGAAGAAC
 ACTCCAGAGGATTTACGCAAGCAGGTAGCACCCTGCTAAAGAGCTTCCAAGGGGAGATTGATGCACTGA
 GTAAAAGAAGCAAAGAAGCAGAGGCAGCCTTCTGACTGTGTACAAGAGACTAATTGATGTTCCAGATCC
 GGTACCAGCCCTGGACGTCCGGCAACAGCTGGAATAAAAGTGCAGCGTCTACACGACATTGAAACAGAG
 AACCAGAACTTAGGGAAACACTAGAAGAGTACAACAAGGAGTTTGTGTAAGTGAATAAATCAAGAGGTTA
 CGATAAAAGCACTTAAGGAGAAAATCCGAGAATACGAGCAGACCCCTGAAGAGTCAGGCCGAGACCATTGC
 TCTGGAGAAAGAGCAGAAGCTACAAAATGATTTTGCAGAGAAGGAGAGAAAGCTGCAAGAGACACAGATG
 TCCACCACCTCAAACCTGGAGGAAGCTGAGCACAACTCCAGACTCTGCAAAACAGCCCTGGAAAAAACTC
 GAACAGAAATATTTGACCTGAAAACCAATATGATGAAGAACTACTGCAAAGGCCGATGAGATCGAGAT
 GATCATGACCGACCTTGAACGAGCAACAGAGGGCAGAGGTGGCACAGAGAGAAGCAGAGACTTTAAGG
 GAACAGCTCTCATCGCCAACCACTCTCTCAACTGGCCTCGCAGATCCAGAAGGCTCCAGATGTGGAGC
 AGGCCATAGAGGTGCTGACCCGATCCAGCCTAGAAGTAGAGTTGGCTGCCAAAGCGGGGAGATCGCCCA
 GCTGGTGGAAAGATGTGCAGCGACTCCAGGCCAGCCTACCAAGCTACGTGAGAATTCGCCAGCCAGATC
 TCACAGCTGGAGCAGCAACTGAATGCCAAGAATAGCACACTCAAACAAGTGAAGAAAAACTCAAAGGCC
 AGGCTGACTATGAAGAAGTGAAGAAAGAGCTGAACACCCTGAAGTCCATGGAGTTTGCACCATCGGAGGG
 AGCAGGGACACAGGACTTACCAAGCCCTGGAGGTTTTACTCCTGGAGAAGAACCCTCGCTGCAGTCC
 GAGAATGCCACGCTGCGCATCTCCAACAGTGACCTGAGCGGGCGCTGTGCGGAGCTGCAGATCCACCTCA
 CTGAGGCCACAGCAAGGCTGTTGAGCAGAAGGAGCTGATCGCTCGCTTGGAGCAGGACCTCAGCACCAT
 CCAGTCCATCCAACGGCCTGATGCCGAGGGAGCTTCCGAGCAAGGCTAGAGAAGATTCCAGAACCATC
 AAGGAAGCTACAGCTCTGTTCTATGGACCCTCAATGTCATCCAGTGGGACCTTCCAGAAGGCCAGGTGG
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 GAGCCGCATGGCCAGCACACCATCCAGGCCCTGCAGAGCGAGCTGGACAGCCTGCGCGCTGACAACATC
 AAATCTTTGAGAAGATCAAGTTCTGCAGAGTTACCCTGGCAGAGGTATCGGCAGTGACGACACGGAGC
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 GAAGTACCTGGGCTGAGCCCTGGGACAAGGCCACACTTGGCATGGGCCGTCTGATTCTCTCCAACAAG
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 TGGCATGGAGTGAGAGTGTGGAGAGAGACTGTGCTGCCACCTGCCCAAGAAGTTCCGCCATCATCTGCA
 CAAATTCACGAGAGTGACAACGGAGCAGCAGCTGGTACTTATGGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231092 representing NM_001291240
 Red=Cloning site Green=Tags(s)

MERASGPLRAAFSSPVLESKAPGAPLDCKETDCGSSSPRGDGIGASQSAELPACPEDAILPATPHRNQL
 LALGVL PASASSAFAAPGQPQDSARWMLCVAGAKLKRELDATATVLANRQDESEQSRKRLIEQSREFKKN
 TPEDLRKQVAPLLKSFQGEIDALSKRSKEAAFLTVYKRLIDVDPVPALDVGQQLIKVQRLHDIETE
 NQKLRETL EEYNKEFAEVKNQEVTIKALKEKIREYEQTLKSAETIALEKEQKLQNDFAEKERKLQETQM
 STTSKLEEAHKLQTLQTALEKTRTELFDLKTKYDEETTAKADEIEMIMDLERANQRAEVAQREATLR
 EQLSSANHSLQLASQIQKAPDVEQAI EVLTRSSLEVELAAKEREIAQLVEDVQRLQASLTKLRENSASQI
 SQLEQQLNAKNSTLKQLEEKLGQADYEEVKELNLTLSMEFAPSEGAGTQDSTKPLEVLLLEKNRSLQS
 ENATLRISNSDL SGRCAELQIHLTEATAKAVEQKELIARLEQDLSTIQSIQRPDAEGASEQGLEKIPEPI
 KEATALFYGPSMSSSGLPEGQVDSLLSIISSQRERFRTRNQELEAESRMAQHTIQALQSELD SLRADNI
 KLF EKIKFLQSYPRGIGSDDELRYSSQYEERLDPFSSF SKRERQRKYLGLSPWDKATLGMGRLLSNK
 MARTISFFYTLFLHCLVFLVLYKLAWSESVERDCAATCAKKFADHLHKFHESDNGAAAGDLWQ

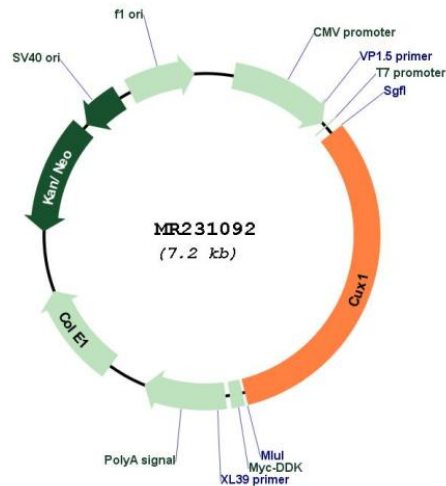
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001291240

ORF Size: 2289 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_001291240.1](#), [NP_001278169.1](#)

RefSeq Size: 3369 bp

RefSeq ORF: 2292 bp

Locus ID: 13047

Cytogenetics: 5 75.96 cM

MW: 86 kDa

Gene Summary: Transcription factor involved in the control of neuronal differentiation in the brain. Regulates dendrite development and branching, and dendritic spine formation in cortical layers II-III (PubMed:20510857). Also involved in the control of synaptogenesis (Probable). In addition, it has probably a broad role in mammalian development as a repressor of developmentally regulated gene expression. May act by preventing binding of positively-activating CCAAT factors to promoters. Component of nf-munr repressor; binds to the matrix attachment regions (MARs) (5' and 3') of the immunoglobulin heavy chain enhancer. Represses T-cell receptor (TCR) beta enhancer function by binding to MARbeta, an ATC-rich DNA sequence located upstream of the TCR beta enhancer. Binds to the TH enhancer; may require the basic helix-loop-helix protein TCF4 as a coactivator.[UniProtKB/Swiss-Prot Function]