

Product datasheet for **MR231090**

Cux1 (NM_001291239) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cux1 (NM_001291239) 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:

>MR231090 representing NM_001291239
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGCGCGCTCAGGTCGGCTCCGAGCTGCCTTCTCCAGCCGGTTCTCGAAAGCAAAGCCCCGGGG
CCCCGCTGGACTGTAAGGAGACTGATTGTGGTTCTCTCGTCGCTCGAGGGGATGGTATCGGGCTTCCCA
ATCCGCGCGGAGCTGCCTGCGTGCCAGAGGATGCTATTCTGCCTGCCACCCCTCATCGGAACCAGCTG
CTCGCCCTCGGGGTCTCCCTGCTAGTGTAGCTCCGCGTTCGCGGCGCTGGACAGCCCCAGGATTCTG
CCAGGTGGATGTTGTGCGTAGCCGGAGCCAAGTTGAAGAGAGAACTTGATGCCACCGCAACAGTATTGGC
AAACAGGCAAGATGAGAGCGAACAGTCCAGAAAGCGGCTCATTGAGCAGAGCCGAGAATCAAGAAGAAC
ACTCCAGAGGATTTACGCAAGCAGGTAGCACCCTGCTAAAGAGCTTCCAAGGGGAGATTGATGCACTGA
GTAAAAGAAGCAAAGAAGCAGAGGCAGCCTTCTGACTGTGTACAAGAGACTAATTGATGTTCCAGATCC
GGTACCAGCCCTGGACGTGGGCAACAGCTGGAATAAAAGTGCAGCGTCTACACGACATTGAAACAGAG
AACCAGAACTTAGGGAAACACTAGAAGAGTACAACAAGGAGTTTCTGTAAGTGAATAAATCAAGAGGTTA
CGATAAAAGCACTTAAGGAGAAAATCCGAGAATACGAGCAGACCCCTGAAGAGTCAGGCCGAGACCATTGC
TCTGGAGAAAGAGCAGAAGCTACAAAATGATTTTGAGAGAAAGGAGAGAAAGCTGCAAGAGACACAGATG
TCCACCACCTCAAACCTGGAGGAAGCTGAGCACAACTCCAGACTCTGCAAAACAGCCCTGGAAAAAACTC
GAACAGAAATATTTGACCTGAAAACCAATATGATGAAGAACTACTGCAAAGGCCGATGAGATCGAGAT
GATCATGACCGACCTTGAACGAGCCAACAGAGGGCAGAGGTGGCACAGAGAGAAGCAGAGACTTTAAGG
GAACAGCTCTCATCGGCAACCACTCTCTCCAAGTGGCTCGCAGATCCAGAAGGCTCCAGATGTGGCCA
TAGAGGTGCTGACCCGATCCAGCCTAGAAGTAGAGTTGGCTGCCAAAGAGCGGGAGATCGCCAGCTGGT
GGAAGATGTGCAGCGACTCCAGGCCAGCCTCACCAAGCTACGTGAGAATTCGCGCCAGCCAGATCTCACAG
CTGGAGCAGCAACTGAATGCCAAGAATAGCACACTCAAACAAGTGAAGAAAACTCAAAGGCCAGGCTG
ACTATGAAGAAGTGAAGAAAGAGCTGAACACCCTGAAGTCCATGGAGTTTGCACCATCGAGGGAGCAGG
GACACAGGACTCTACCAAGCCCTGGAGGTTTTACTCCTGGAGAAGAACCCTCGCTGCAGTCCGAGAAT
GCCACGCTGCGCATCTCCAACAGTGACCTGAGCGGGCGCTGTGCGGAGCTGCAGATCCACCTCACTGAGG
CCACAGCCAAGGCTGTTGAGCAGAAGGAGCTGATCGCTCGCTTGGAGCAGGACCTCAGCACCATCCAGTC
CATCCAACGGCCTGATGCCGAGGGAGCTTCCGAGCAAGGCCTAGAGAAGATTCCAGAACCATCAAGGAA
GCTACAGCTCTGTTCTATGGACCCTCAATGTCATCCAGTGGGACCCTTCCAGAAGGCCAGGTGGACTCCC
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CATGGCCAGCACACCATCCAGGCCCTGCAGAGCGAGCTGGACAGCCTGCGCGCTGACAACATCAAACCT
TTTGAGAAGATCAAGTTCCTGCAGAGTTACCCTGGCAGAGGTATCGGCAGTGACGACACGGAGCTGCGAT
ACTCCTCCCAATACGAGGAACGCTGGACCCTTCTCCTCCTCAGCAAGAGGGAGCGGCAGAGGAAGTA
CCTGGGCTGAGCCCTGGGACAAGGCCACACTGGCATGGGCGCTGATTCTCTCCAACAAGATGGCC
CGCACCATCAGCTTCTTTACACCTTGTTCCTGCACTGCCTGGTCTTTCTGGTGTGTACAAGCTGGCAT
GGAGTGAGAGTGTGGAGAGACTGTGCTGCCACCTGCCCAAGAAGTTCGCGCATCATCTGCACAAATT
CCACGAGAGTGACAACGGAGCAGCAGCTGGTGACTTATGGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231090 representing NM_001291239
 Red=Cloning site Green=Tags(s)

MERASGPLRAAFSSPVLESKAPGAPLDCKETDCGSSSPRGDIGASQSAELPACPEDAILPATPHRNQL
 LALGVL PASASSAFAAPGQPQDSARWMLCVAGAKLKRELDATATVLANRQDESEQSRKRLIEQSREFKKN
 TPEDLRKQVAPLLKSFQGEIDALSKRSKEAAFLTVYKRLIDVPDPVPALDVGQQLIKVQRLHDIETE
 NQKLRETL EEYNKEFAEVKNQEVTIKALKEKIREYEQTLKSAETIALEKEQKLQNDFAEKERKLQETQM
 STTSKLEEAHKLQTLQTALEKTRTELFDLTKTYDEETTAKADEIEMIMTDLERANQRAEVAQREATLR
 EQLSSANHSLQLASQIQKAPDVAIEVL TRSSLEVELAAKEREIAQLVEDVQRLQASLTKLRENSASQISQ
 LEQQLNAKNSTLKQLEEKLGQADYEEVKELNLTLSMEFAPSEGAGTQDSTKPLEVLLLEKNRSLQSEN
 ATLRISNSDL SGRCAELQIHLTEATAKAVEQKELIARLEQDLSTIQSIQRPAEGASEQGLEKIPEPIKE
 ATALFYGPSMSSSGTLPEGQVDSLLSIISSQRERFRTRNQLEAESRMAQHTIQALQSELDSLADNLIK
 FEKIKFLQSYPRGIGSDDELRYSSQYEERLDPFSSFSKRERQRKYLGLSPWDKATLGMGRLILSNKMA
 RTISFFYTLFLHCLVFLVLYKLAWSESVERDCAATCAKKFADHLHKFHESDNGAAAGDLWQ

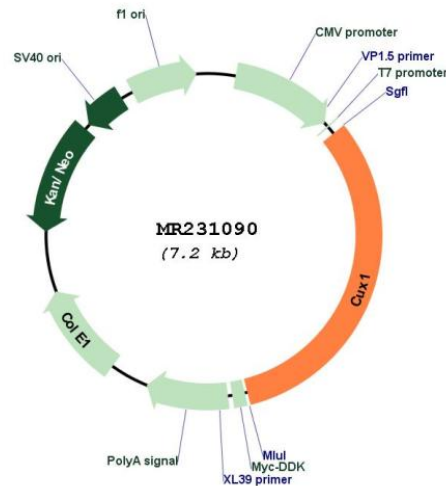
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001291239

ORF Size: 2283 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_001291239.1](#), [NP_001278168.1](#)

RefSeq Size: 3363 bp

RefSeq ORF: 2286 bp

Locus ID: 13047

Cytogenetics: 5 75.96 cM

MW: 85.7 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]