

## Product datasheet for MR231851

### Cux1 (NM\_001291233) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cux1 (NM\_001291233) 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  
**ORF Nucleotide Sequence:** >MR231851 representing NM\_001291233  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGGAGCGCGCTCAGGTCGGCTCCGAGCTGCCTTCTCCAGCCCGTTCTCGAAAGCAAAGCCCCGGGG  
CCCCGCTGGACTGTAAGGAGACTGATTGTGTTCTCGTCGCCTCGAGGGATGGTATCGGGCTTCCCA  
ATCCGCGCGGAGCTGCCTGCGTGCCAGAGGATGCTATTCTGCCTGCCACCCCTCATCGGAACAGCTG  
CTCGCCCTCGGGTCTCCCTGCTAGTGCTAGCTCCGCGTTTCGCGCGCCTGGACAGCCCAAGATTCTG  
CCAGGTGGATGTTGTGCGTAGCCGGAGCCAAGTTGAAGAGAGAATTGATGCCACCAGCAACAGTATTGGC  
AAACAGGCAAGATGAGAGCGAACAGTCCAGAAAGCGGCTCATTGAGCAGAGCCGAGAATCAAGAAGAAC  
ACTCCAGAGGATTTACGCAAGCAGGTAGCACCCTGCTAAAGAGCTTCCAAGGGGAGATTGATGCACTGA  
GTAAAAGAAGCAAAGAAGCAGAGGCAGCCTTCTTGACTGTGTACAAGAGACTAATTGATGTTCCAGATCC  
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CTGAGAGTCGGCGCCCGGGACCCTTGCCGGCCTCCCCTCCTCCTCAGTTGCCCCGCAACACGGGGGAACA  
 GGTTCCTCAATACTAACGGTACACACCCTTCTCACCAGCGGGGTTAAGTCAAGACTTTTTTCAGCTCAAAC  
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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR231851 representing NM\_001291233  
 Red=Cloning site Green=Tags(s)

MERASGPLRAAFSSPVLESKAPGAPLDCKETDCGSSSPRGDIGASQSAELPACPEDAILPATPHRNQL  
 LALGVL PASASSAFAAPGQPQSARWMLCVAGAKLKRELDATATVLANRQDESEQSRKRL IEQSREFKKN  
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 PKPWHKLSLKGREPFVRMQLWLNPNVVEKLMDMKRMEKAYMKRRHSSVSDSQCEPPSVGIDYSQGAS  
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 IQAGSQGAGASDPSARSSRAAPSSEGDSCDGEATDAEPEGGNIVATK SQGGLAEVA A A A P A D R E E A T Q  
 PAEKAKAQLCSGTPGQDDGEDASRPRPLPEGLADAPAPVPSLAAPAAGEDAATSATAPATATEAPGAAR  
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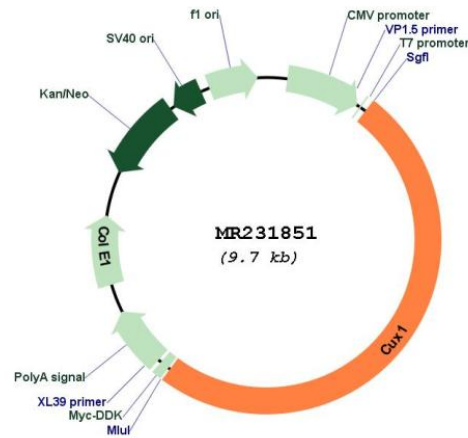
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001291233

**ORF Size:** 4839 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\\_001291233.1](#), [NP\\_001278162.1](#)

**RefSeq Size:** 13507 bp

**RefSeq ORF:** 4842 bp

Locus ID: 13047

UniProt ID: [P53564](#)

Cytogenetics: 5 75.96 cM

MW: 175.8 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]