

Product datasheet for **MG222919**

Cux1 (NM_198602) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cux1 (NM_198602) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cux1
Synonyms:	CDP; Cutl1; Cux; Cux-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG222919 representing NM_198602
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGCGGCCAATGTGGGATCGATGTTTCAATATTGGAAGCGCTTTGATTTACAGCAGCTGCAGAGAGAAC
TTGATGCCACCGCAACAGTATTGGCAAACAGGCAAGATGAGAGCGAACAGTCCAGAAAGCGGCTCATTGA
GCAGAGCCGAGAATCAAGAAGAACAACCTCCAGAGGATTTACGCAAGCAGGTAGCACCACCTGCTAAAGAGC
TTCCAAGGGGAGATTGATGCACTGAGTAAAAGAAGCAAAGAAGCAGAGGCGAGCCTTCTTGACTGTGTACA
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CGCTCTACACGACATTGAAACAGAGAACCAGAACTTAGGGAAACACTAGAAGAGTACAACAAGGAGTTT
GCTGAAGTGAAAAATCAAGAGGTTACGATAAAAAGCACTTAAGGAGAAAAATCCGAGAATACGAGCAGACCC
TGAAGAGTCAGGCCGAGACCATTGCTCTGGAGAAAAGCAGAAGCTACAAAATGATTTTGCAGAGAAGGA
GAGAAAGCTGCAAGAGACACAGATGTCCACCACCTCAAACTGGAGGAAGCTGAGCACAACCTCCAGACT
CTGCAAACAGCCCTGGAAAAAATCGAACAGAATTATTTGACCTGAAAACCAAATATGATGAAGAACTA
CTGCAAAGGCCGATGAGATCGAGATGATCATGACCGACCTTGAACGAGCCAACAGAGGGCAGAGGTGGC
ACAGAGAGAAGCAGAGACTTTAAGGGAACAGCTCTCATCGGCCAACCACTCTCTCCAACCTGGCCTCGCAG
ATCCAGAAGGCTCCAGATGTGGCCATAGAGGTGCTGACCCGATCCAGCCTAGAAGTAGAGTTGGCTGCCA
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GAATTCGCCAGCCAGATCTCACAGCTGGAGCAGCAACTGAATGCCAAGAATAGCACACTCAAACAAGT
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AGTTTGCACCATCGGAGGGAGCAGGGACACAGGACTCTACCAAGCCCTGGAGGTTTTACTCTGGAGAA
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CTTCCAGAAGGCCAGGTGGACTCCCTGCTTTCCATCATCTCCAGCCAAAGGGAACGTTTTCCGACCCGGA
ACCAAGAGCTGGAAGCCGAGAGCCGATGGCCAGCACACCATCCAGGCCCTGCAGAGCGAGCTGGACAG
CCTGCGCGCTGACAACATCAAACCTTTTGAGAAGATCAAGTTCCTGCAGAGTTACCCTGGCAGAGGTATC
GGCAGTGACGACCGGAGCTGCGATACTCTCCCAATACGAGGAACGCCTGGACCCTTTCTCTCTTCA
GCAAGAGGGAGCGCAGAGGAAGTACCTGGGCCTGAGCCCTGGGACAAGGCCACACTTGGCATGGGCCG
TCTGATTTCTCCAACAAGATGGCCCGACCATCAGCTTCTTTTACACCTTGTTCTGCACTGCCTGGTC
TTTCTGGTGTGTACAAGCTGGCATGGAGTGAGAGTGTGGAGAGAGACTGTGCTGCCACCTGCGCCAAGA
AGTTCCGGATCATCTGCACAAATCCACGAGAGTGACAACGGAGCAGCAGCTGGTGACTTATGGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG222919 representing NM_198602
 Red=Cloning site Green=Tags(s)

MAANVGSMFYWKRFDLQQLQRELDATATVLANRQDESEQSRKRLIEQSREFKKNTPEDLRKQVAPLLKS
 FQGEIDALSKRSKEAEEAFLTVYKRLIDVPDPVPALDVGQQLKIKVQRLHDIETENQKLRETL EEYNKEF
 AEVKNQEVTIKALKEKIREYEQTLKSQAETIALEKEQKLQNDFAEKERKLQETQMSTTSKLEEAHKLQT
 LQTALEKTRTELFDLTKTYDEETAKADEIEMIMTDLERANQRAEVAQREAEATLREQLSSANHSLQLASQ
 IQKAPDVAIEVLTRSSLEVELAAKEREIAQLVEDVQRLQASLTKLRENSASQISQLEQQLNAKNSTLKQL
 EEKLGQADYEEVKELNLTLSMEFAPSEGAGTQDSTKPLEVLLLEKNRSLQSENATLRISNSDLSGRCA
 ELQIHLTEATAKAVEQKELIARLEQDLSTIQSIQRPAEGASEQGLEKIPEPIKEATALFYGPMSSSGT
 LPEGQVDSLLSIISSQRERFRTRNQELEAESRMAQHTIQALQSELDSLRADNIKLFKIKFLQSYPRGI
 GSDDTELRYSSQYEERLDPFSSF SKRERQRKYLGLSPWDKATLGMGRLLSNKMARTISFFYTLFLHCLV
 FLVLYKLAWSESVERDCAATCAKKFADHLHKFHESDNGAAAGDLWQ

TRTRPLE - GFP Tag - V

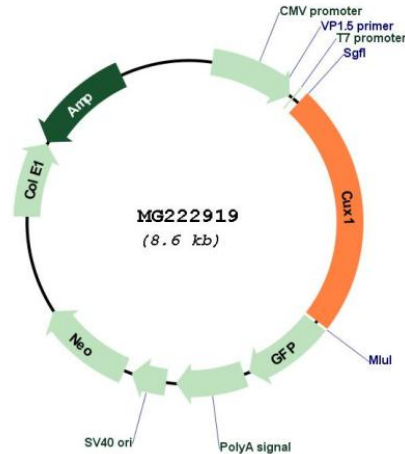
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_198602

ORF Size: 2028 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_198602.3](#), [NP_941004.2](#)

RefSeq Size: 2972 bp

RefSeq ORF: 2031 bp

Locus ID: 13047

Cytogenetics: 5 75.96 cM

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]