

Product datasheet for MC209022

Neurod2 (NM 010895) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Neurod2 (NM 010895) Mouse Untagged Clone

Tag: Tag Free Symbol: Neurod2

Synonyms: bHLHa1; Ndrf

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC209022 representing NM_010895

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCTGACCCGCCTGTTCAGCGAGCCCGGCCTCCTCTCGGACGTGCCCAAGTTCGCCAGCTGGGGCGACG GGCTCCAGGACCCGCCCGGGCCGACCAAGCCAGTGTCTCTTCGTGGAGGAGAAGAGATCCCTGAACCCACG TGGACGAGGCGGAGCGGCCCAAGAAGCGCGGGCCGAAGAAACGCAAGATGACCAAGGCGCGTCT GGAGCGCTCCAAGCTGCGGCGACAGAAGGCCAACGCGCGGGAGCGCAACCGCATGCACGACCTGAACGCG GCTCTGGACAACCTGCGCAAGGTGGTGCCCTGCTACTCCAAGACGCAGAAGCTGTCCAAGATCGAGACCC TGCGCCTGGCCAAGAACTACATCTGGGCTCTCTCGGAGATCTTGCGCTCCGGGAAGCGGCCGGATCTGGT CGTTCGCCATGCATCCGTACCCATACCCGTGCTCCCGCCTGGCAGGCGCACAGTGTCAGGCGGCTGGCGG CCTGGGCGGAGGCGCGCCCCTGCGGACCCACGGCTACTGCGCCGCCTACGAGACGCTGTACGCG GCGGCCGGTGGCGGCGCTAGCCCGGACTACAACAGCTCCGAGTACGAGGGTCCACTCAGTCCCCCGC TCTGTCTCAACGGCAACTTCTCGCTCAAGCAGGACTCGTCCCCCGATCACGAGAAGAGCTACCACTACTC TATGCACTACTCGGCGCTGCCCGGCTCACGGCCCACGGGCCACGGGCTGGTCTTCGGCTCGTCGGCCGTG CGCGGGGGCGTCCACTCCGAGAATCTCTTGTCTTACGATATGCACCTTCACCACGATCGGGGCCCCATGT ACGAGGAGCTCAACGCATTTTTCCATAACTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Restriction Sites: Sgfl-Mlul

ACCN: NM_010895 **Insert Size:** 1152 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by

calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeg: NM 010895.3, NP 035025.3

 RefSeq Size:
 3137 bp

 RefSeq ORF:
 1152 bp

 Locus ID:
 18013

 UniProt ID:
 Q62414

Cytogenetics: 11 61.75 cM





Gene Summary:

Transcriptional regulator implicated in neuronal determination. Mediates calcium-dependent transcription activation by binding to E box-containing promoter. Critical factor essential for the repression of the genetic program for neuronal differentiation; prevents the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. Induces transcription of ZEB1, which in turn represses neuronal differentiation by down-regulating REST expression. Plays a role in the establishment and maturation of thalamocortical connections; involved in the segregation of thalamic afferents into distinct barrel domains within layer VI of the somatosensory cortex. Involved in the development of the cerebellar and hippocampal granular neurons, neurons in the basolateral nucleus of amygdala and the hypothalamic-pituitary axis. Associates with chromatin to the DPYSL3 E box-containing promoter.[UniProtKB/Swiss-Prot Function]