

## Product datasheet for **MG204851**

### Neurod4 (NM\_007501) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Neurod4 (NM_007501) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Neurod4
Synonyms:	AI846749; ATH-3; Ato; Atoh3; bHLH; bHLHa4; Math; MATH-; MATH-3; Math3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204851 representing NM_007501 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAAAAATGTATATGAAATCCAAGGACATGGTGGAGCTGGTCAACACACAATCCTGGATGGACAAAG  
GTCTGAGCTCTCAAAATGAGATGAAGGAGCAAGAGAGAAGACCGGGCTCTTATGGAATGCTCGGAACCTT  
AACTGAAGAGCATGACAGTATTGAGGAGGATGAAGAAGAGGAAGAAGATGGAGATAAACCTAAAAGAAGA  
GGTCCCAAGAAAAGAAGATGACTAAAGCTCGCCTTGAAGATTCAGGGCTCGAAGAGTCAAGGCCAATG  
CTAGAGAACGGACCCGGATGCATGGCCTGAATGATGCCTTGATAATCTTAGGAGAGTCATGCCATGTTA  
CTCTAAAACCTCAAAGCTTCCAAAGATAGAGACTCTTCGACTGGCAAGGAACTACATCTGGGCCTTGCT  
GAAGTCTTGAGACTGGTCAAGACTTGAAGGGAAGGGATTTGTAGAGATGCTATGTAAAGTCTCTCTC  
AACCCACAAGCAACCTGGTTGCTGGATGCCTCAAAGTGGGCTCAATCTACCCTCCTGGAGAAGCATGA  
GGAAAAATCTTCAATTTGTGACTCTACTATCTGTCCACAGCTTCAACTATCAGTCTCCAGGGCTCCCC  
AGCCCTCCTTATGGCCATATGGAACACATTCTCTCCATCTCAAGCCTCAACATTTAAGAGTTTGGGTG  
ACTCTTTTGGGAGCCATCCACCTGACTGCAGTACCCCCCTTATGAGGGTCCACTCACACCACCCCTGAG  
CATTAGTGGAACCTTCTCCTTAAAGCAAGACGGCTCCCCTGATTTGAAAAATCCTACAATTTATGCCA  
CATTATACCTCTGCAAGTCTAAGTTCAGGGCATGTGCATTCAACTCCCTTTCAGACTGGCACTCCCCGCT  
ATGATGTTCTGTAGACCTGAGCTATGATTCTACTCCACCATAGCATTGGAACTCAGCTCAATACGAT  
CTTCTCTGAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG204851 representing NM\_007501  
 Red=Cloning site Green=Tags(s)

MAKMYMKSMDMVELVNTQSWMDKGLSSQNMKEQERRPGSYGMLGTLTEEHDSIEEDEEEEEEDGDKPKRR  
 GPKKKKMTKARLERFRARRVKANARERTRMHGLNDALDNLRRVMPYCYSKTQKLSKIETLRLARNYIWALS  
 EVLETGQTLLEGKGFVEMLCCKGLSQPTSNLVAGCLQLGPQSTLLEKHEEKSSICDSTISVHSFNYQSPGLP  
 SPPYGHMETHSLHLKQPQFKSLGDSFGSHPPDCSTPPYEGPLTPPLSISGNFSLKQDQDGPDLKSYNFMF  
 HYTSASLSSGHVHSTPFQTGTTPRYDVPVDLSYDSYSHHSIGTQLNTIFSD

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_007501

**ORF Size:** 990 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\\_007501.5](#)

**RefSeq Size:** 3376 bp

**RefSeq ORF:** 993 bp

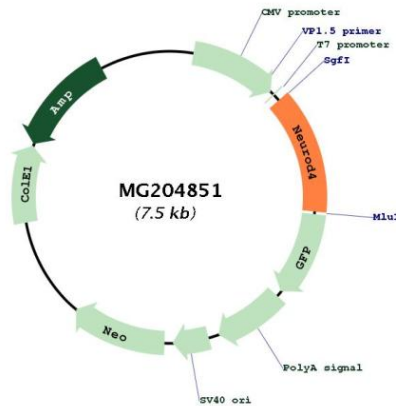
**Locus ID:** 11923

**UniProt ID:** [O09105](#)

**Cytogenetics:** 10 77.81 cM

**Gene Summary:** This gene belongs to the neurogenic differentiation factor family and encodes a basic helix-loop-helix (bHLH) transcription factor which is expressed in the developing nervous system with high levels of expression in the brain, retina and cranial ganglions. Expression gradually becomes restricted to the neural retina. It is a key gene in the Ngn2-regulated neuronal differentiation pathway, coordinating the onset of cortical gene transcription. This gene also regulates amacrine cell fate determination in the retina. [provided by RefSeq, Jul 2016]

### Product images:



Circular map for MG204851