

## Product datasheet for RC222464

### NEUROD4 (NM\_021191) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NEUROD4 (NM\_021191) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NEUROD4  
**Synonyms:** ATH-3; ATH3; Atoh3; bHLHa4; MATH-3; MATH3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC222464 representing NM\_021191  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGTCAAAACTTTTGTAAAATCCAAGGAGATGGGAGAGCTAGTCAACACACCATCCTGGATGGATAAAG  
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 GGTCCTCAAGAAAAGAAGATGACCAAAGCTCGCCTTGAGAGATTCAGGGCTCGAAGAGTCAAGGCTAATG  
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 CTCTAAAACCCAAAACCTTTCCAAGATAGAGACTCTTAGACTGGCCAGGAAGTATATTTGGGCTTTATCT  
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 GGATAAATCTCCTATTTGTGACTCTGCCATCTCTGTCCACAACCTCAACTATCAGTCTCCGGGGCTTCT  
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 AATCGTCTTTGGGAGCCATCTGCCTGACTGCAGTACACCCCTTATGAGGGCCCACTCACTCCACCCCT  
 GAGCATCAGTGGAACTTCTCCTGAAGCAAGATGGGTCTCCTGACCTAGAAAAATCCTACAGCTTCATG  
 CCACATTACCTTCTTCAAGTCTAAGCTCAGGGCATGTGCATTCAACTCCTTTTCAGGCTGGTACCCCTC  
 GTTATGATGTTCTTATAGACATGTCCTATGATTCTACCCCATCATGGTATTGGGACCAACTCAATAC  
 AGTCTTCACTGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC222464 representing NM\_021191  
Red=Cloning site Green=Tags(s)

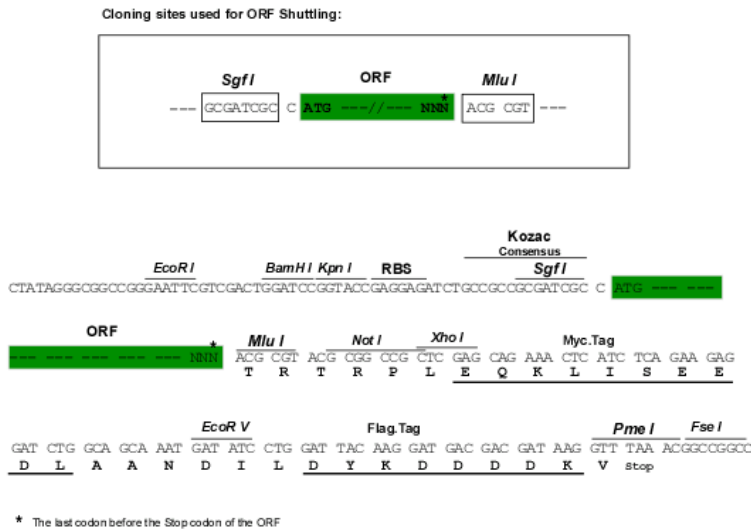
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EVLETGQTPEGKGFVEMLCCKLSQPTSNLVAGCLQLGPQSVLLEKHEDKSPICDSAISVHNFNYQSPGLP
SPPYGHMETHLLHLKPQVFKSLGESSFGSHLPDCSTPPYEGPLTPPLSISGNFSLKQDQDGPDLKSYSFM
PHYPSSSLSSGHVHSTPFQAGTPRYDVPIDMSYDSYPHHGIGTQLNTVFTE
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2920\\_b05.zip](https://cdn.origene.com/chromatograms/mg2920_b05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_021191

**ORF Size:** 993 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\\_021191.3](#)

**RefSeq Size:** 1481 bp

**RefSeq ORF:** 996 bp

**Locus ID:** 58158

**UniProt ID:** [Q9HD90](#)

**Cytogenetics:** 12q13.2

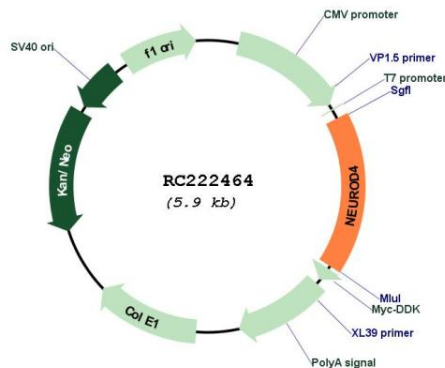
**Domains:** HLH

**Protein Families:** Druggable Genome, Transcription Factors

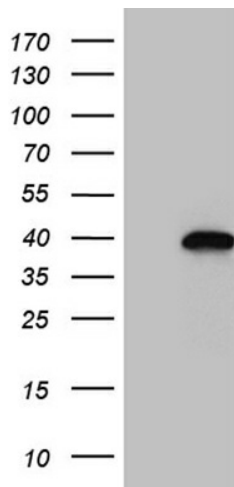
**MW:** 36.9 kDa

**Gene Summary:** Probably acts as a transcriptional activator. Mediates neuronal differentiation. Required for the regulation of amacrine cell fate specification in the retina (By similarity).[UniProtKB/Swiss-Prot Function]

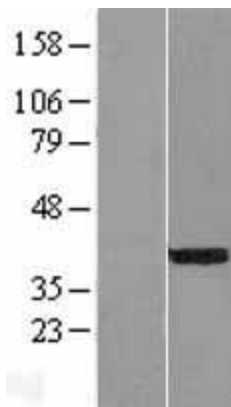
## Product images:



Circular map for RC222464



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NEUROD4 (Cat# RC222464, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NEUROD4 (Cat# [TA810658])(1:2000). Positive lysates [LY412030] (100ug) and [LC412030] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412030]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222464 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).