

## Product datasheet for **MR215484**

### Nox3 (NM\_198958) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nox3 (NM_198958) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nox3
Synonyms:	GP91-3; het; nmf25; nmf250
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR215484 representing NM\_198958  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCCGGTGTGCTGGATTCTGAACGAGAGTGGTCTTCGTGGTTGCTCTTTATGGCTGGCAGTAAACG  
 CCTATCTGTTTATTGACACATTCTCTGGTATACTGAAGAGGAGGCTTTCTTTTATACACGAGTTATTCT  
 GGGTCCGCATTGGCATGGGCCCGGCATCTGCCGTGTGCCTGAATTTAACTGCATGCTAATTCTGTTA  
 CCTGTCAGTCGGAACCTCATTCTCACTGGTGAAGGAAACAAGTGTGTGCTGTAGAGGACCATGGAGAAGAC  
 AACTAGACAAAAACCTCAACTCCACAACTCGTTGCCTACGGGATAGCTGTCAATTCAGTTATCCACAT  
 TGTGGCACACTTGTCAACCTGGAGCGTTATCACCTGGTCAAGGCAAGGATGCTGAAGGGCTGCTGGCT  
 GCACTTTCCAACTTGGCGATGCCCAATGAGAGCTACCTCAATCCAGTCCGCACCTTTGATATGGGCA  
 CAACCACTGAGCTATTGATGACAGTGTGAGGAATTACTGGCTGGTATCTCTCTGGCTCTGGTCTTCAT  
 CATGACCTCTTCAACGAATTCATCAGAAGTCTCTTATGAGCTCTTCTGGTACACACACCATATCTTT  
 GTCTTCTTCTTATCAGTCTGGCCATCCACGGAGGAGTGCATCATTCCAGGCCAACTCCAGAGAGTC  
 TCCGGCTGCACAATGTCACGTACTGCAGAGACCACTATGCTGAATGGCAGGCAGCTGCCTTATGCCCTGT  
 ACCTCAATTTTCTGGCAAGGAACCTTCGGCCTGGAAATGGGCTTTGGTCTGTGGTCTTGTATGCGTGT  
 GAAAGAATAATTAGGTTCTGGAGATCTCACCAAGAAGTTGTCATTACCAAGTGGTGAGTCACCCATCTG  
 CAGTCTTGGAACTTCACATGAAGAAGCGGAGACTCAAGATGGCACCTGGACAGTACATCTTATCCAGTG  
 CCCATCTGTCTCCCCCTGGAGTGGCACCCCTTACTCTACCTCCGCTCCCCAGGAGGACTTCTCAGT  
 GTACACATCAGAGCCTCAGGAGACTGGACAGAGGCGTTATTGAAGGCTTTAGAGTAGAGGGACAGGCTC  
 CCAGTGAAGTCTGTAGCATGCCGAGGCTAGCAGTGGATGGGCCCTTTGGAGGCTCTCTGGCAGATGTATT  
 TCACTACCCCGTGAAGCGTGTGCATTGCAACGGGAATTGGAGTCACTCCCTTCGCCTCTCTCTGAAGTCT  
 GTGTGGTATAAGTGTGTGAATCACAGAGCCTGCCTGAGCTGAGCAAGGTGACTTCTATTGGATCTGCC  
 GGGATGCCGAGCATTGAGTGGTTTGTGATCTGTTACTGTCACTGGAACACGGATGAGTGAACAAGG  
 GAAGGCTCATTTACTGAGCTACCATATATATCTCACTGGTGGGATGAAAACAGGCAATTCACATAGCT  
 TTACACTGGGATGAAAGTCTGGATGTGATAACAGGCTTAAAGCAGAAGGCTTTCTATGGGCGACCAACT  
 GGAACGACGAATCAAGCAGATTGCCTACAATCACCCAGCAGCAGCATTGGCGTGTCTCTGTGGATC  
 CAAAGCCATGTCAAAGACTCTTCAAAGATGTGTCGTTTGTACTCATCTGTGGATCCGAGGGCGTTCAT  
 TTCTATTACAACAAGGAAAACCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR215484 representing NM\_198958  
 Red=Cloning site Green=Tags(s)

MPVCWILNESGSFVVALLWLVAVNAYLFIDTFFWYTEEEAFFYTRVILGSALAWARASAVCLNFCMLILL  
 PVSARNFISLVRGTSVCCRGPWRRQLDKNLNFHKLVAAGIYAVNSVHIVAHFLNERYHLGQAKDAEGLLA  
 ALSKLGDPNESHVLPVRFDMGTTTELLMTVSGITGLISLALVFIMTSSTEFIRRSSYELFWYTHHIF  
 VFFFISLAIHGGGRIIRGQTPESLRHNVTYCRDHYAEWQAAALCPVPQFSGKEPSAWKALGPVLYAC  
 ERIIRFWRSHQEVVITKVVSHPSAVLELHMKKRDFKMAPQYIFIQCPSPLEWHPFTLTSAPQEDFFS  
 VHIRASGDWTEALLKAFRVEGQAPSELCSMPRLAVDGPFGGSLADVHFYVSVCIATGIGVTPFASLLKS  
 VVYKCCESQSLPELKVYFYWICRDAGAFEFWADLLL SLETRMSEQGAHLLSYHIYLTGWENQAIHIA  
 LHWDESVDVITGLKQKAFYGRPNWNDEFKQIAYNHPSSSIVGFFCGSKAMSKTLQKMCRLYSSVDPGRVH  
 FYYNKENF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9014\\_g12.zip](https://cdn.origene.com/chromatograms/mm9014_g12.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_198958

**ORF Size:** 1704 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\\_198958.2](#), [NP\\_945196.2](#)

**RefSeq Size:** 1792 bp

**RefSeq ORF:** 1707 bp

**Locus ID:** 224480

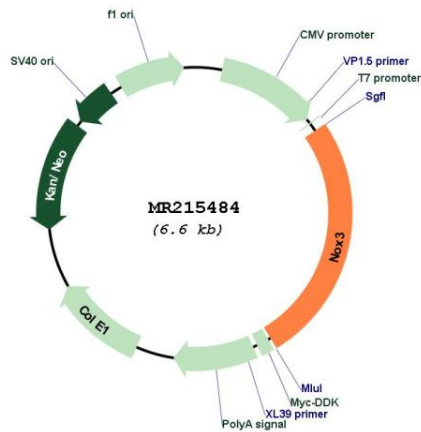
**UniProt ID:** [Q672J9](#)

**Cytogenetics:** 17 2.05 cM

**MW:** 64.9 kDa

**Gene Summary:** This gene encodes a member of the NOX family of NADPH oxidases. These enzymes catalyze the transfer of electrons from NADPH to molecular oxygen to produce superoxide and other reactive oxygen species (ROS). The ROS generated by family members have been implicated in numerous biological functions including host defense, posttranslational processing of proteins, cellular signaling, regulation of gene expression, and cell differentiation. The protein encoded by this gene is expressed predominantly in the inner ear and is involved in the biogenesis of otoconia, which are crystalline structures of the inner ear involved in the perception of gravity and linear acceleration. In mouse mutations of this gene lead to the absence of otoconia and vestibular dysfunction. [provided by RefSeq, Jun 2013]

**Product images:**



Circular map for MR215484