

## Product datasheet for **MG215484**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nox3 (NM_198958) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nox3
Synonyms:	GP91-3; het; nmf25; nmf250
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG215484 representing NM\_198958  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCAACGCACAGGCTCAAATGGACGGAAGAATAACGTGTTGGAGTAAGAGAAGTGTCATGCCGGTGT  
 GCTGGATTCTGAACGAGAGTGGTCTTCTGGTGGTCTCTTATGGCTGGCAGTAAACGCCTATCTGTT  
 TATTGACACATTCTTCTGGTATACTGAAGAGGAGGCTTTCTTTTATACACGAGTTATTCTGGGTTCCGCA  
 TTGGCATGGGCCCGGCATCTGCCGTGTGCCTGAATTTAACTGCATGCTAATTCTGTTACCTGTGACGTC  
 GGAACCTCATTCTACTGGTGAAGGAACAAGTGTGTGCTGTAGAGGACCATGGAGAAGACAACACTAGACAA  
 AAACCTCAACTCCACAAACTCGTTGCCTACGGGATAGCTGTCAATTCAGTTATCCACATTGTGGCACAC  
 TTGTTCAACTGGAGCGTTATCACCTGGTCCAGGCAAGGATGCTGAAGGGCTGTGGCTGCACTTTCCA  
 AACTTGGCGATGCCCAAATGAGAGCTACCTCAATCCAGTCCGCACCTTTGATATGGGCACAACCACTGA  
 GCTATTGATGACAGTGTGAGGAATTACTGGCCTGGGTATCTCTCTGGCTCTGGTCTTCATCATGACCTCT  
 TCAACCGAATTCATCAGAAGTCTCTTATGAGCTCTTCTGGTACACACACCATATCTTTGTCTTCTTCT  
 TCATCAGTCTGGCCATCCACGGAGGAGTGCATCATTGAGGCCAAACTCCAGAGAGTCTCCGGCTGCA  
 CAATGTACGACTGACAGAGACCACTATGCTGAATGGCAGGCAGCTGCCCTATGCCCTGTACCTCAATTT  
 TCTGGCAAGGAACCTTCGGCCTGGAAAATGGGCTTTGGGCTCTGTGGTCTTGTATGCGTGTGAAAGAATAA  
 TTAGGTTCTGGAGATCTACCAAGAAGTGTGATTACCAAGGTGGTGAAGTCAACCATCTGCAGTCTGGA  
 ACTTCACATGAAGAAGCGAGACTTCAAGATGGCACCTGGACAGTACATCTTCATCCAGTCCCATCTGTC  
 TCCCCCTGGAGTGGCACCCCTTCACTCTCACCTCCGCTCCCCAGGAGGACTTCTCAGTGTACACATCA  
 GAGCCTCAGGAGACTGGACAGAGCGCTTATTGAAGGCCCTTAGAGTAGAGGGACAGGCTCCAGTGAAGT  
 CTGTAGCATGCCGAGGCTAGCAGTGGATGGGCCCTTTGGAGGCTCTCTGGCAGATGATTTCACTACCCC  
 GTGAGCGTGTGCATTGCAACGGGAATTGGAGTCACTCCCTTCGCCTCTTCTGAACTGTGTGGTATA  
 AGTGTGTGAATCACAGAGCCTGCCTGAGCTGAGCAAGGTGACTTCTATTGGATCTGCCGGATGCCGG  
 AGCATTGAGTGGTTTGTGATCTGTTACTGTCAGTGGAAACACGGATGAGTGAACAAGGGAAGGCTCAT  
 TACTGAGCTACCATATATCTCACTGGCTGGGATGAAAACAGGCAATTCACATAGCTTTACTGAGG  
 ATGAAAGTCTGGATGTGATAACAGGCTTAAAGCAGAAGGCTTTCTATGGGCGACCAACTGGAACGACGA  
 ATCAAGCAGATTGCCTACAATCACCCAGCAGCAGCATTGGCGTGTCTTCTGTGGATCCAAAGCCATG  
 TCAAAGACTCTTCAAAGATGTGTCGTTTGTACTCATCTGTGGATCCGAGGGGCTTCATTTCTATTACA  
 ACAAGGAAAACCTC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG215484 representing NM\_198958  
 Red=Cloning site Green=Tags(s)

MQRTGSNGRKGITCWSKRSVMPVCWILNESGSFVALLWLVNAYLFIDTFFWYTEEEAFFYTRVILGSA  
 LAWARASAVCLNFCMLILLPVSRNFISLVRGTSVCCRGPWRRQLDKNLNFHKLVAAGIYAVNSVIHIVAH  
 LFNLERYHLGQAKDAEGLLAALSKLGDAPNESYLNVPVTFDMGTTTELLMTVSGITGLGSLALVFIMTS  
 STEFIRRSSYELFWYTHHIFVFFFISLAIHGGRIIRGQTPELRLHNVTYCRDHYAEWQAAALCPVPQF  
 SGKEPSAWKVALGPVVLACERIIIRFWRSHQEVVITKVVSHPSAVLELHMKKRDFKMAPGQYIFIQCPV  
 SPLEWHPFLLTSAPQEDFFSVHIRASGDWTEALLKAFRVEGQAPSELCSMPRLAVDGPFGGSLADVHFYP  
 VSVCIATGIGVTPFASLLKSVWYKCCESQSLPELKVYFYWICRDAGAFEFADLLLLETRMSEQGAH  
 LLSYHIYLTGWENQAIHIALHWDESLDVTGLKQKAFYGRPNWDEFKQIAYNHPSSSIGVYFCGSKAM  
 SKTLQKMCRLYSSVDPRGVHFFYNNKFN

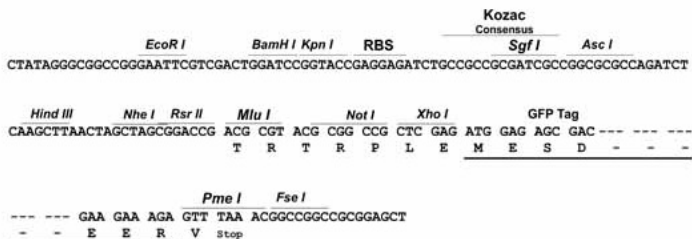
**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

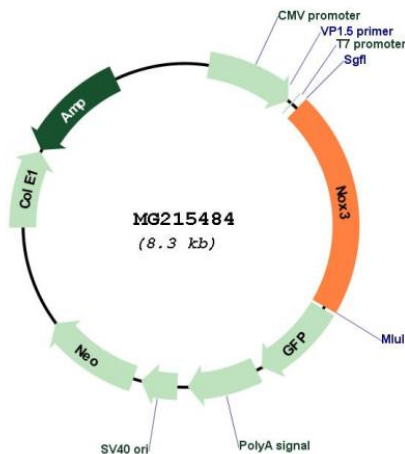
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_198958  
 ORF Size: 1704 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_198958.2</a> , <a href="#">NP_945196.2</a>
<b>RefSeq Size:</b>	1792 bp
<b>RefSeq ORF:</b>	1707 bp
<b>Locus ID:</b>	224480
<b>UniProt ID:</b>	<a href="#">Q672J9</a>
<b>Cytogenetics:</b>	17 2.05 cM
<b>Gene Summary:</b>	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]