

Product datasheet for **SC304349**

NOX3 (NM_015718) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOX3 (NM_015718) Human Untagged Clone
Tag:	Tag Free
Symbol:	NOX3
Synonyms:	GP91-3; MOX-2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_015718, the custom clone sequence may differ by one or more nucleotides

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ATGATGGGGTGCTGGATTTTGAATGAGGGTCTCTCCACCATATTAGTACTCTCATGGCTGGGAATAAATT
TTTATCTGTTTATTGACACGTTCTACTGGTATGAAGAGGAGGAGTCTTTCCATTACACACGAGTTATTTT
GGGTTCAACACTGGCTTGGGCACGAGCATCCGCACTGTGCCTGAATTTTAACTGCATGCTAATTCTAATA
CCTGTGAGTCGAAACCTTATTTTCATTATAAGAGGAACAAGTATTTGCTGCAGAGGACCGTGGAGGAGGC
AATTAGACAAAAACCTCAGATTTTCAAAAACCTGGTCGCCTATGGGATAGCTGTTAATGCAACCATCCACAT
CGTGGCGCATTCTTCAACCTGGAACGCTACCACTGGAGCCAGTCCGAGGAGGCCAGGGACTTCTGGCC
GCACTTTCCAAGCTGGGCAACACCCCTAACGAGAGCTACCTCAACCCTGTCCGGACCTTCCCACAAAACA
CAACCACTGAATTGCTAAGGACAATAGCAGGCGTCACCGGTCTGGTGATCTCTCTGGCTTGTAGTCTTGAT
CATGACCTCGTCAACTGAGTTCATCAGACAGGCCCTCCTATGAGTTGTTCTGGTACACACACCATGTTTTT
ATCGTCTTCTTTCTCAGCCTGGCCATCCATGGGACGGGTCGGATTGTTTCGAGGCCAAACCAAGACAGTC
TCTCTCTGCACAACATCACCTTCTGTAGAGACCGCTATGCAGAATGGCAGACAGTGGCCCAATGCCCCGT
GCCTCAATTTTCTGGCAAGGAACCTCGGCTTGGAAATGGATTTTAGGCCCTGTGGTCTTGTATGCATGT
GAAAGAATAAATTAGGTTCTGGCGATTTCAACAAGAAGTTGTCATTACCAAGTGGTAAGCCACCCCTCTG
GAGTCTTGGAACTTACATGAAAAAGCGTGGCTTTAAAATGGCGCCAGGGCAGTACATCTTGGTGCAGTG
CCCAGCCATATCTTCGCTGGAGTGGCACCCCTTACCCTTACCTCTGCCCCCAGGAGGACTTTTTCAGC
GTGCACATCCGGGCAGCAGGAGACTGGACAGCAGCGCTACTGGAGGCCTTTGGGGCAGAGGGACAGGCC
TCCAGGAGCCCTGGAGCCTGCCAAGGCTGGCAGTGGACGGGCCCTTTGAACTGCCCTGACAGATGTATT
TCACTACCCAGTGTGTGTGCGTTGCCGCGGGGATCGGAGTCACTCCCTTCGCTCTTCTGAAATCT
ATATGGGTACAAAATGCAGTGAAGCAGACACCCCACTGAAGCTGAGCAAGGTGATTTCTACTGGTTGCC
GGGATGCAAGAGCTTTTGAAGTGGTTTGTGATCTTACTCTCCCTGAAACACGGATGAGTGAGCAGGG
GAAAACCTCACTTTCTGAGTTATCATATATTTCTTACCGGCTGGGATGAAAATCAGGCTCTTACATAGCT
TTACACTGGGACGAAAATACTGACGTGATTACAGGCTTAAAGCAGAAGACCTTCTATGGGAGGCCAACT
GGAACAATGAGTTCAAGCAGATTGCCTACAATCACCCAGCAGCAGTATTGGCGTGTCTTCTGTGGACC
TAAAGCTCTCTCGAGGACACTTCAAAGATGTGCCACTTGATTTCATCAGCTGACCCAGAGGTGTTTCAT
TTCTATTACAACAAGGAGAGCTTCTAG
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015718 unedited

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GGAGCTTAAACTTGTAACGACTCATAAAGGCGGCCGGAATTCGCCCTGTTGAATTAT
GATGGGGCTCCGGATTTTGAATGAGGGTCTCTCCACCATATTAGTACTCTCATGGCTGGG
AATAAATTTTTATCTGTTTATTGACACGTTCTACTGGTATGAAGAGGAGGAGTCTTTCCA
TTACACACGAGTTATTTTGGGTTCAACACTGGCTTGGGCACGAGCATCCGCACTGTGCCT
GAATTTTAACTGCATGCTAATTCTAATACCTGTGAGTCAAACCTTATTTTCATTATAAG
AGGAACAAGTATTTGCTGCAGAGGACCGTGGAGGAGGCAATTAGACAAAAACCTCAGATT
TCACAAACTGGTCGCCTATGGGATAGCTGTTAATGCAACCATCCACATCGTGGCGCATT
CTTCAACCTGGAACGCTACCACTGGAGCCAGTCCGAGGAGGCCAGGGACTTCTGGCCGC
ACTTTCCAAGCTGGGCAACACCCCTAACGAGAGCTACCTCAACCCTGTCCGGACCTTCCC
CACAAACACAACCACTGAATTGCTAAGGACAATAGCAGGCGTCACCGGTCTGGTGATCTC
TCTGGCTTGTAGTCTTGATCATGACCTCGTCAACTGAGTTCATCAGACAGGCCCTCCTATGA
GTTGTTCTGGTACACACACCATGTTTTTCATCGTCTTCTTCTCAGCCTGGCCATCCATGG
GACGGGTTCGGATTGTTTCGAGGCCAAACCAAGACAGTCTCTCTCTGCACAACATCACCTT
CTGTAGAGACCGCTATGCAGAATGGCAGACAGTGGCCCAATGCCCCGTGCCCAATTTTC
TGGCAAGGAACCTTCGGCTTTGGAATGGATTTTAAAGCCCTGTGGTCTTGTATGCATGTNG
AG
    
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3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_015718 unedited NGGGCCTGGAATGGCACTTCCAGNCCAGNAAAGCACTGGGNGAGGGTCACAGGNATGCC ACCCGGGATCTGTTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAAGCTCTCCTTGT TGTAATAGAAATGAACACCTCTGGGGTCAGCTGATGAATACAAGTGGCACATCTTTTGAA GTGTCCTCGAGAGAGCTTTAGGTCCACAGAAGAACACGCCAATACTGCTGCTGGGGTGAT TGTAGGCAATCTGCTTGAACCTATTGTTCCAGTTGGGCCTCCCATAGAAGGTCTTCTGCT TTAAGCCTGTAATCACGTCAGTATTTTCGTCGCCAGTGTAAGCTATGTGAAGAGCCTGAT TTTTCATCCCAGCCGGTAAGAAATATATGATAACTCAGAAAGTGAGTTTTCCCTGCTCAC TCATCCGTGTTTCCAGGGAGAGTAAGAGATCAGCAAACCACTCAAAGCTCTTGATCCC GGCAAATCCAGTAGAAATACACCTTGCTCAGCTTCAGTGGGGTCTGTGCCTCACTGCATT TGTACCATATAGATTTTCAGAAGAGCAGCGAAGGGAGTGACTCCGATCCCCGCGGCAACGC ACACACACTGGGTAGTGAAATACATCTGTCAGGGCAGTTCAAAGGGCCCGTCCACTG CCAGCCTTGGCAGGCTCCAGGGCTCCTGGAGGGCTGTCCCTCTGCCCAAAGGCCTCCA GTAGCGTGTGTCAGTCTCCTGCTGCCGGATGTGCACGCTGAANAAGTCTTCTGGG GGGCAGAGGTAAGGGTGAAGGGTGCCACTCCAGCGAAGATATGGCTGGGCACTGCACCA AGATGTACTGCCCTGGCCCATTTTAAACCACGCTTTTTCATGTGAAGTTCCCAGACTC CAGAG</p>
Restriction Sites:	Please inquire
ACCN:	NM_015718
OTI Disclaimer:	<p>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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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_015718.1](#), [NP_056533.1](#)

RefSeq Size: 2044 bp

RefSeq ORF: 1707 bp

Locus ID: 50508

UniProt ID: [Q9HBY0](#)

Cytogenetics: 6q25.3

Protein Families: Transmembrane

Protein Pathways: Leukocyte transendothelial migration

Gene Summary: This gene encodes a member of the NOX family of NADPH oxidases. These enzymes have the capacity to generate superoxide and other reactive oxygen species (ROS) and transport electrons across the plasma membrane. 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/otolith, which are crystalline structures of the inner ear involved in the perception of gravity.[provided by RefSeq, May 2009]