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Product datasheet for RC221245

NOX3 (NM_015718) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOX3 (NM_015718) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NOX3
Synonyms:	GP91-3; MOX-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221245 representing NM_015718
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGGGGTGCTGGATTTTGAATGAGGGTCTCTCCACCATATTAGTACTCTCATGGCTGGGAATAAATT
TTTATCTGTTTATTGACACGTTCTACTGGTATGAAGAGGAGGAGTCTTTCCATTACACACGAGTTATTTT
GGGTTCAACACTGGCTTGGGCACGAGCATCCGCACTGTGCCTGAATTTTAACTGCATGCTAATTCTAATA
CCTGTCAGTCGAAACCTTATTTCATTCATAAGAGGAACAAGTATTTGCTGCAGAGGACCGTGGAGGAGGC
AATTAGACAAAAACCTCAGATTTCACAAACTGGTCGCCTATGGGATAGCTGTTAATGCAACCATCCACAT
CGTGGCGCATTTCTTCAACCTGGAACGCTACCACTGGAGCCAGTCCGAGGAGGCCCAGGGACTTCTGGCC
GCACTTTCCAAGCTGGGCAACACCCCTAACGAGAGCTACCTCAACCCTGTCCGGACCTTCCCCACAAACA
CAACCACTGAATTGCTAAGGACAATAGCAGGCGTCACCGGTCTGGTGATCTCTCTGGCTTTAGTCTTGAT
CATGACCTCGTCAACTGAGTTCATCAGACAGGCCTCCTATGAGTTGTTCTGGTACACACACCATGTTTTC
ATCGTCTTCTTTCTCAGCCTGGCCATCCATGGGACGGGTCGGATTGTTCGAGGCCAAACCCAAGACAGTC
TCTCTCTGCACAACATCACCTTCTGTAGAGACCGCTATGCAGAATGGCAGACAGTGGCCCAATGCCCCGT
GCCTCAATTTTCTGGCAAGGAACCCTCGGCTTGGAAATGGATTTTAGGCCCTGTGGTCTTGTATGCATGT
GAAAGAATAATTAGGTTCTGGCGATTTCAACAAGAAGTTGTCATTACCAAGGTGGTAAGCCACCCCTCTG
GAGTCCTGGAACTTCACATGAAAAAGCGTGGCTTTAAAATGGCGCCAGGGCAGTACATCTTGGTGCAGTG
CCCAGCCATATCTTCGCTGGAGTGGCACCCCTTCACCCTTACCTCTGCCCCCCAGGAAGACTTTTTCAGC
GTGCACATCCGGGCAGCAGGAGACTGGACAGCAGCGCTACTGGAGGCCTTTGGGGCAGAGGGACAGGCCC
TCCAGGAGCCCTGGAGCCTGCCAAGGCTGGCAGTGGACGGGCCCTTTGGAACTGCCCTGACAGATGTATT
TCACTACCCAGTGTGTGTGTGCGTTGCCGCGGGGATCGGAGTCACTCCCTTCGCTGCTCTTCTGAAATCT
ATATGGTACAAATGCAGTGAGGCACAGACCCCACTGAAGCTGAGCAAGGTGTATTTCTACTGGATTTGCC
GGGATGCAAGAGCTTTTGAGTGGTTTGCTGATCTCTTACTCTCCCTGGAAACACGGATGAGTGAGCAGGG
GAAAACTCACTTTCTGAGTTATCATATATTTCTTACCGGCTGGGATGAAAATCAGGCTCTTCACATAGCT
TTACACTGGGACGAAAATACTGACGTGATTACAGGCTTAAAGCAGAAGACCTTCTATGGGAGGCCCAACT
GGAACAATGAGTTCAAGCAGATTGCCTACAATCACCCCAGCAGCAGTATTGGCGTGTTCTTCTGTGGACC
TAAAGCTCTCTCGAGGACACTTCAAAAGATGTGCCACTTGTATTCATCAGCTGACCCCAGAGGTGTTCAT
TTCTATTACAACAAGGAGAGCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221245 representing NM_015718
Red=Cloning site Green=Tags(s)

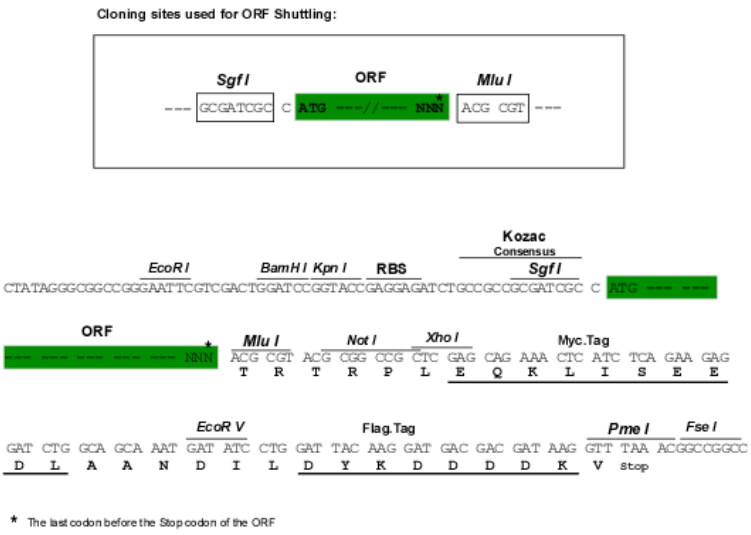
MMGCWILNEGLSTILVLSWLGINFYLFIDTFYWYEEEESFHYTRVILGSTLAWARASALCLNFNCMLILI
PVSRNLISFIRGTSICCRGPWRRQLDKNLRFHKLVAYGIAVNATIHIVAHFFNLERYHWSQSEEAQGLLA
ALSKLGNTPNESYLNPVRTFPTNTTTELLRTIAGVTGLVISLALVLIMTSSTEFIRQASYELFWYTHHVF
IVFFLSLAIHGTGRIVRGQTQDSLSLHNITFCRDRYAEWQTVAQCPVPQFSGKEPSAWKWILGPVVLYAC
ERIIRFWRFQQEVVITKVVSHPSGVLELHMKKRGFKMAPGQYILVQCPAISSLEWHPFTLTSAPQEDFFS
VHIRAAGDWTAALLEAFGAEGQALQEPWSLPRLAVDGPFGTALTDVFHYPVCVCVAAGIGVTPFAALLKS
IWYKCSEAQTPLKLSKVYFYWICRDARAFEWFADLLLSLETRMSEQGKTHFLSYHIFLTGWDENQALHIA
LHWDENTDVITGLKQKTFYGRPNWNNEFKQIAYNHPSSSIGVFFCGPKALSRTLQKMCHLYSSADPRGVH
FYYNKESF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6718_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_015718

ORF Size: 1704 bp

OTI Disclaimer: 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.

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.

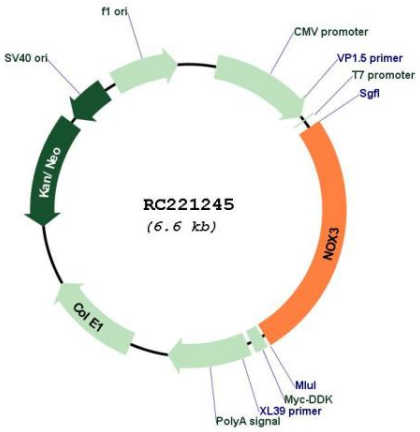
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

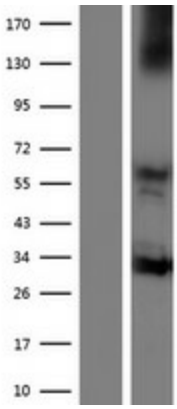
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_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
MW:	64.8 kDa
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, posttranlational 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]

Product images:



Circular map for RC221245



Western blot validation of overexpression lysate (Cat# [LY414350]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221245 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).