

Product datasheet for **MR230453**

Nox4 (NM_001285833) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nox4 (NM_001285833) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nox4
Synonyms:	A1648021
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230453 representing NM_001285833
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGCCGGACAGTCCTGGCTTATCTTCGAGGATCACAGAAGTCCCTAGCAGGAGAACAAGAAGATTGT
 TGGATAAAGCAAGACTCTACACATCACATGTGGTGAACATCTGTATTTCTCAGGTGTGCATGTAGC
 CGCCCACTTGGTGAATGCCCTCACTTTTCAGTGAACACAGTGAAGATTTCTTGAACGAATGCAGCA
 AGATACCAGAATGAGGATCCCAGAAAGCTTCTCTTACAACCATTCCTGGTCTGACGGGTGTCTGCATGG
 TGGTGGTATTGTTCTCATGGTTACAGCTTCTACCTACGCAATAAGAGTTTCTAATTATGATATCTTCTG
 GTATACTACAACCTCTTCTTGTCTTCTACATGCTGCTGCTGTTGCATGTTTCAGGTGGTTTGTGAAG
 TATCAGACAAATGTAGACTCACCTCCTGGCTGCATTAGTCTTAACCAGACATCATCCAGAATATGT
 CCATACCAGACTACGTCTCAGAACATTTTCATGGATCTTGCCTCGAGGGTTTTCAAATAGAAGATCG
 TTACCAGAAAACACTTGTGAAGATTTGCCTGGAAGAACCAAGTCCAAGCTCATTTCCACAGACTGG
 ATTTGGATTTCTGGACCTTTGTGCCTTTATTGTGCGGAGAGACTTACCGATGCATCAGGAGCAACAAC
 CTGTCAACCATCATCTCAGTCATCAATCATCCCTCTGATGTAATGGAACCTCGTATGATCAAGAAAACCT
 TAAAGCAAGACCTGGCCAGTATATTATTCTCCATTGCCCCAGTGTATCAGCATTAGAAAACCAACCATTT
 ACTCTCACAATGCTCTGTGAGAAACGATGGCAGCCCTGGCACAGCAGAGTATGGATATACAGTTTCTTTG
 TCTGTAGTGTGCTGCATGCCATGAAGATACTTCCAAGATGAACCATGCCTTCTTACTGTGCTCTACTGA
 AACCAAGCAACATTTGGTGTCCACTTTAAAGTAGTAGGAGACTGGACAGAACGATTCCGGGATTTGCTA
 CTGCCTCCATCAAGTCAAGACTCTGAGATTCTGCCCTTCACTCTAGAAATACCCTAAGTTATACA
 TTGATGGTCCATTTGGAAGCCCATTTGAGGAGTCACTGAACTAAGAGTTAGTCTCTGTGTGGCTGGAGG
 CATTGGAGTCACTCCATTTGCATCGATACTAAACACTCTACTGGATGACTGGAACCATACAAGTTAAGA
 AGACTGTACTTTTCTGGGTGTGAGAGACATCCAATCATTCCAGTGGTTTGCAGATTTACTCTGTGTGT
 TGCATAACAAGTTTTGGCAAGAAAACAGACCTGACTTTGTGAACATCCAGCTGTACCTCAGTCAAACAGA
 TGGGATTCAGAAGATAATTGGAGAAAAATCACACACTGAATTCGAGACTTTTTCATTGGGCGTCTCGG
 TGGAACTTTTATTTGATGAAATAGCAAATGTAACAGAGGGAAAACAGTTGGAGTTTTCTGCTGTGGAC
 CCAGTTCTATTTCAAGACTCTTCATAGTTTGTAGTAACCGGAACAACCTCATATGGACAAAATTTGAATA
 CAATAAAGAATCCTTCAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230453 representing NM_001285833
 Red=Cloning site Green=Tags(s)

MCRTVLAYLRGSQKVPSSRRTRRLDLSKTLHITCGVTICIFSGVHVAHLVNALNFSVNYSEDFLELNAA
 RYQNEPRKLLFTTIPGLTGVMVVVFLMVTASTYAIRVSNYDIFWYTHNLFFVFYMLLLLHVSGLLK
 YQTNVDTHPPGCISLNQTSQQNMSIPDYVSEHFGSLPRGFSKLEDRYQKTLVKICLLEPKFQAHFPQTW
 IWISGPLCLYCAERLYRCIRSNKPVTIISVINHPSDVMELRMIKENFKARPGQYIILHCPVSALENHPF
 TLMCLCQKRWQPWHSRVWIYSFFVCSDAACHEDTSKMNHAFLLCPTETKATFGVHFVVDWTERFRDLL
 LPPSSQDSEILPFIHSRNYPKLYIDGPFSGPFEEVSLNVEVSLCVAGGIGVTPFASILNLLDDWPKYKLR
 RLYFIWVCRDIQSFQWFADLLCVLHNKFWQENRPDFVNIQLYLSQTDGIQKIIGEKYHTLNSRLFIRPR
 WKLLFDEIAKCNRGKTVGVFCCGPSSISKTLHSLSNRNNSYGTKEFNKESFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

ACCN:	NM_001285833
ORF Size:	1629 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:	<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_001285833.1 , NP_001272762.1
RefSeq Size:	3873 bp
RefSeq ORF:	1632 bp
Locus ID:	50490
Cytogenetics:	7 D3
MW:	63.2 kDa
Gene Summary:	Constitutive NADPH oxidase which generates superoxide intracellularly upon formation of a complex with CYBA/p22phox. Regulates signaling cascades probably through phosphatases inhibition. May function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity. May regulate insulin signaling cascade. May play a role in apoptosis, bone resorption and lipolysaccharide-mediated activation of NFkB.[UniProtKB/Swiss-Prot Function]