

Product datasheet for **MR227192**

Nox4 (NM_015760) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nox4 (NM_015760) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nox4
Synonyms:	A1648021
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227192 representing NM_015760
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGTGTCCTGGAGGAGCTGGCTGGCCAACGAAGGGTTAAACACCTCTGCCTGCTCATTGGCTGT
 CCCTAAACGTTCTACTTTTCTGGAAAACCTTCCTGCTGTACAACCAAGGGCCAGAATACTACTACATTCA
 CCAAAATGTTGGGCTAGGATTGTGTTTAAAGCAGAGCATCTGCATCTGTCCTGAACCTCAACTGCAGCCTC
 ATCCTTTTACCTATGTGCCGGACAGTCTGGCTTATCTTCGAGGATCACAGAAGGTCCTAGCAGGAGAA
 CAAGAAGATTGTTGGATAAAAGCAAGACTCTACACATCACATGGGTGTAACATCTGTATTTTCTCAGG
 TGTGCATGTAGCCGCCCACTTGGTGAATGCCCTCAACTTTTTCAGTGAACACAGTGAAGATTTCTTGA
 CTGAATGCAGCAAGATACCAGAATGAGGATCCCAGAAAGCTTCTTTTACAACCATTCCTGGTCTGACGG
 GTGTCTGCATGGTGGTATTGTTCTCATGGTTACAGCTTCTACCTACGCAATAAGAGTTTCTAATTA
 TGATATCTTCTGGTATACTCACAACTCTCTTTGTCTTCTACATGCTGCTGCTGTTGCATGTTTACAGT
 GGTTTGTGAAGTATCAGACAAATGTAGACACTCACCTCCTGGCTGCATTAGTCTTAACAGACATCAT
 CCCAGAATATGTCCATACCAGACTACGTCTCAGAACATTTTCATGGATCTTTGCCTCGAGGGTTTCAA
 ATTAGAAGATCGTTACCAGAAAACACTTGTGAAGATTTGCCTGGAAGAACCAAGTTCCAAGCTCATTTC
 CCACAGACCTGGATTTGGATTTCTGGACCTTTGTGCCTTATTGTGCGGAGAGACTTTACCGATGCATCA
 GGAGCAACAAACCTGTCAACATCATCTCAGTCAATCATCCCTCTGATGTAATGGAACCCGTATGAT
 CAAAGAAAACCTTAAAGCAAGACCTGGCCAGTATATTATCTCCATTGCCCCAGTGTATCAGCATTAGAA
 AACCACCCATTTACTCTACAATGTGCTCTACTGAAACCAAGCAACATTTGGTGTCCACTTTAAAGTAG
 TAGGAGACTGGACAGAACGATTCCGGGATTTGCTACTGCCTCCATCAAGTCAAGACTCTGAGATTTGCC
 CTTGATTTCACTCTAGAAAATTACCCTAAGTTATACATTGATGGTCCATTTGGAAGCCCATTTGAGGAGTCA
 CTGAACTATGAAGTTAGTCTCTGTGTGGCTGGAGGCAATTGGAGTCACTCCATTTGCATCGATACTAAACA
 CTCTACTGGATGACTGGAACCATAACAAGTTAAGAAGACTGACTTTTATCTGGGTGTGCAGAGACATCCA
 ATCATTCCAGTGGTTTGCAGATTACTCTGTGTGTTGCATAACAAGTTTGGCAAGAAAACAGACCTGAC
 TTTGTGAACATCCAGCTGTACCTCAGTCAAACAGATGGGATTCAGAAGATAATTGGAGAAAAATACACA
 CACTGAATTCGAGACTTTTTCATGGGCGTCTCGGTGGAACCTTTATTTGATGAAATAGCAAAATGTAA
 CAGAGGGAAAACAGTTGGAGTTTCTGCTGTGGACCCAGTCTATTTCCAAGACTCTTCATAGTTTGAGT
 AACCGGAACAACATATGGGACAAAATTTGAATACAATAAAGAATCCTTCAGC

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227192 representing NM_015760
 Red=Cloning site Green=Tags(s)

MAVSWRSLANEGVKHLCLLIWLSLNVLLFWKTFLLYNQGPYYIYHQLGLGLCLSRASASVNLNCSL
 ILLPMCRTLVALYLRGSQKVPSRRTRRLLDKSKTLHITCGVTICIFSGVHVAHLVNALNFSVNYSEDFLE
 LNAARYQNEPRKLLFTTIPGLTGVCMVVFLFMVMTASTYAIRVSNYDIFWYTHNLFVYMLLLLHVSG
 GLLKYQTNVDTHPPGCISLNQTSQNMSIPDYVSEHFHGS LPRGFSKLEDYQKTLVKICLEEPKFQAHF
 PQTWIIWISGPLCLYCAERLYRCIRSNKPVTIISVINHPSDVMELRMIKENFKARPGQYIILHCPVSVALE
 NHPFTLTMCPTETKATFGVHFVVDWTERFRDLLLPSSQDSEILPFIHSRNPPLYIDGPF GSPFEES
 LNYEVSLCVAGGIGVTPFASILNLTLLDDWKPYKLRRLLYFIWVCRDIQSFQWFADLLCVLHNKFWQENRPD
 FVNIQLYLSQTDGIQKIIGEKYHTLNSRLFIGRPRWKLDFDEIAKCNRGKTVGVFCGPPSSISKTLHLSL
 NRNNSYGTKFEYNKESFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_015760

ORF Size: 1734 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_015760.5](#), [NP_056575.1](#)
RefSeq Size: 3760 bp

RefSeq ORF: 1737 bp

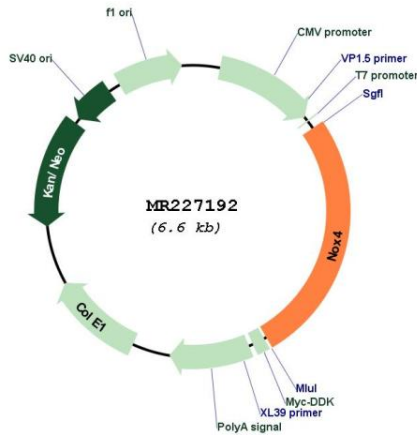
Locus ID: 50490

UniProt ID: [Q9JHI8](#)
Cytogenetics: 7 D3

MW: 67 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 lipopolysaccharide-mediated activation of NFkB.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227192