

Product datasheet for **RG238598**

NADPH oxidase 4 (NOX4) (NM_001291926) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NADPH oxidase 4 (NOX4) (NM_001291926) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NADPH oxidase 4
Synonyms:	KOX; KOX-1; RENOX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238598 representing NM_001291926.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGTGCCGAACACTCTTGGCTTACCTCCGAGGATCACAGAAGTTCCAAGCAGGAGAACCAGGAGATTG
TTGGATAAAAGCAGAACATTCCATATTACCTGGTGTACTATCTGTATTTTCTCAGGCGTGCATGTG
GCTGCCCATCTGGTGAATGCCCTCAACTTCTCAGTGAATTACAGTGAAGACTTTGTTGAAGTGAATGCA
GCAAGATACCGAGATGAGGATCCTAGAAAACCTCTCTTCACAACTGTTCCCTGGCCTGACAGGGGTCTGC
ATGGTGGTGGTGTATTCTCATGATCACAGCCTCTACATATGCAATAAGAGTTTCTAACTATGATATC
TTCTGGTATACTATAACCTCTTCTTTGTCTTCTACATGCTGCTGACGTTGCATGTTTCAGGAGGGCTG
CTGAAGTATAAACTAATTTAGATACCCACCCTCCCGGCTGCATCAGTCTAACCGAACCAGCTCTCAG
AATATTTCTTACCAGAGATTTTCTCAGAACATTTTCATGAACCTTTCCCTGAAGGATTTTCAAACCG
GCAGAGTTTACCAGCACAAATTTGTGAAGATTTGTATGGAAGAGCCAGATTCCAAGCTAATTTTCCA
CAGACTTGGCTTTGGATTTCTGGACCTTTGTGCCTGTACTGTGCCGAAAGACTTTACAGGTATATCCGG
AGCAATAAGCCAGTCACCATCATTTCCGGTCATAAGTCATCCCTCAGATGCATGGAATCCGAATGGTC
AAAGAAAATTTAAAGCAAGACCTGGTCAGTATATTACTCTACATTGTCCAGTGTATCTGCATTAGAA
AATCATCCATTTACCCTCACAATGTGTCCAACCTGAAACCAAAGCAACATTTGGGGTTCATCTTAAATA
GTAGGAGACTGGACAGAACGATTTCCGAGATTTACTACTGCCTCCATCTAGTCAAGACTCCGAAATTCG
CCCTTCATTCAATCTAGAAAATATCCCAAGCTGTATTTGATGGTCCTTTTGGAAGTCCATTTGAGGAA
TCACTGAACTATGAGGTCAGCCTCTGCGTGGCTGGAGGCATTGGAGTAACTCCATTTGCATCAATACTC
AACACCCTGTTGGATGACTGGAACCATACAAGCTTAGAAGACTATACTTTATTTGGGTATGCAGAGAT
ATCCGACTCCTCCGTTGGTTTGCAGATTTACTCTGTATGTTGCATAACAAGTTTTGGCAAGAGAACAGA
CCTGACTATGTCAACATCCAGCTGTACCTCAGTCAAACAGATGGGATACAGAAGATAAATGGAGAAAAA
TATCATGCACTGAATTAAGACTGTTTATAGGACGTCCTCGTGGAAACTTTTGTGTTGATGAAATAGCA
AAATATAACAGAGGAAAAACAGTTGGTGTCTTCTGTTGTGGACCAATTCATATCCAAGACTCTTCAT
AAACTGAGTAACCAGAACAACCTCATATGGGACAAGATTTGAATACAATAAAGAGTCTTTTCAGC
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
  
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Protein Sequence:

>Peptide sequence encoded by RG238598
 Blue=ORF Red=Cloning site Green=Tag(s)

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MCRTLLAYLRGSQKVPSRRTRRLDKSRTFHITCGVTICIFSGVHVAHLVNALNFSVNYSEDFVELNA
ARYRDEDPRKLLFTTVPGLTGVCMMVVLFLMITASTYAIRVSNYDIFWYTHNLFFVFYMLLTLHVSGLL
LKYQTNLDTHPPGCIISLNRSSQNIISLPEYFSEHFHEPFPEGFSKPAEFTQHKFVKICMEEPRFQANFP
QTWLWISGPLCLYCAERLYRYIRSNKPVTIISVISHPSDVMEIRMVKENFKARPGQYITLHCPVSALE
NHPFTLTMCPTETKATFGVHLKIVGDWTERFRDLLLLPPSSQDSEILPFIQSRNYPKLYIDGPFGSPFEE
SLNYEVSLLCVAGGIGVTPFASILNTLLDDWKPYKLRLYFIWVCRDIQSFVADLLCMLHNKFWQENR
PDYVNIQLYLSQTDGIQKIIGEKYHALNSRLFIRPRWKLLFDEIAKYNRGTGTVGVFCGPNLSKTLH
KLSNQNNSYGTRFEYNKESFS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
  
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Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001291926

ORF Size: 1512 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).

RefSeq: [NM_001291926.1](#), [NP_001278855.1](#)

RefSeq Size: 4455 bp

RefSeq ORF: 1515 bp

Locus ID: 50507

UniProt ID: [Q9NPH5](#)

Cytogenetics: 11q14.3

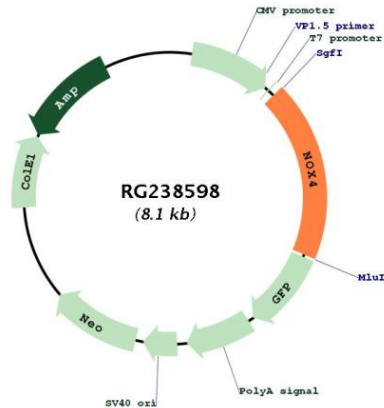
Protein Families: Druggable Genome, Transmembrane

MW: 58.8 kDa

Gene Summary:

This gene encodes a member of the NOX-family of enzymes that functions as the catalytic subunit the NADPH oxidase complex. The encoded protein is localized to non-phagocytic cells where it acts as an oxygen sensor and catalyzes the reduction of molecular oxygen to various reactive oxygen species (ROS). The ROS generated by this protein have been implicated in numerous biological functions including signal transduction, cell differentiation and tumor cell growth. A pseudogene has been identified on the other arm of chromosome 11. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Jan 2009]

Product images:



Circular map for RG238598