

Product datasheet for **RC214207**

NOX5 (NM_024505) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NOX5 (NM_024505) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NOX5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC214207 representing NM_024505
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTGCCGAGGAGGATGCCAGGTGGCTCCGGTGGGTGACTCAGCAGTTTAAGACCATTGCAGGAGAAG
 ATGGGGAGATCAGCCTGCAAGAATTCAAAGCAGCTCTGCATGTGAAAGAGTCCTTCTTGCAGAGCGATT
 CTTTGCCCTATTTGACTCCGATAGAAGTGGCACCATCACCTCCAGGAGCTGCAGGAGGCACTGACCCTG
 CTCATCCATGGCAGCCCATGGACAAACTCAAATTCCTCTTCCAGGTGTATGACATCGATGTGTGTGCAC
 GGCAGGGGGCGTCTGCAGGTACAGAGTGGGGTGTGGGGCAGGCCCGCACTGGGTTTCATCCCCACTCGG
 GACAGGCAGTGGCTCCATTGACCCGGATGAGCTGCGCACTGTGCTGCAGTCGTGTCTGCGCGAGAGCGCC
 ATCTCGCTGCCTGACGAGAAGCTGGACCAGCTGACGCTGGCGCTTTCGAATCGGCCGACCGCGACGGCA
 ACGGGGCCATCACCTTCGAGGAGCTCCGGGACGAGCTGCAGCGCTTCCCCGGAGTCATGGAGAACCTGAC
 CATCAGCGCTGCCACTGGCTGACGGCCCCCGCCCCCGCCACGCCCGCCGCGCCGCGCCAGCTGACC
 CGCGCCTACTGGACAACCACCGCAGCCAGCTGTTCTGCCTGGCCACCTATGCAGGCCTCCACGTGCTGC
 TCTTCGGGCTGGCGGCCAGCGCGCACCGGGACCTCGGCGCCAGCGTCATGGTGGCCAAGGGCTGCGGCCA
 GTGCCTCAACTTCGACTGCAGCTTCATCGCGGTGCTGATGCTCAGACGCTGCCTCACCTGGCTGCGGGCC
 ACGTGGCTGGCTCAAGTCTACCACTGGACCAGAACATCCAGTTCACCAGCTTATGGGTACGTGGTAG
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 CCCTTTCAGTTCTGGGAGCTGCTGCTCACCACGAGGCCCTGGCATTGGCTGGGTACACGGTTCGGCTCC
 CCGACAGGTGTCGCTCTGCTGCTGCTCCTCCTCATGTTTATCTGCTCCAGTTCCTGCATCCGAGGA
 GTGGCCACTTTGAGGTGTTCTATTGGACTCACCTGTCTACCTCCTCGTGTGGCTTCTGCTCATCTTTCA
 TGGGCCAACTTCTGGAAGTGGCTGCTGGTGCCTGGAATCTTGTCTTTCCTGGAGAAGGCCATCGGACTG
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 CGGTCCCAAGGCCAGTGGACAAACAGGCTGTATGAGTCTTCAAGGCATCAGACCCACTGGGCCGTGGTT
 CTAAGAGGCTGTCGAGGAGTGTGACAATGAGAAAGAGTCAAAGGTCGTCGAAGGCTCTGAGATACTTTT
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 TTTGCCTCTGAGCATGCCGTGCTCATCGGGCAGGCATCGGCATCACCCCTTTGCTTCCATTCTGCAGA
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 TTTGTGAGCCTGCTGACTAACTGGAGATGGACCAGGCCGAGGAGGCTCAATACGGCCGCTTCTGGAGC
 TGCATATGTACATGACATCTGCACTGGGCAAGAATGACATGAAGGCCATTGGCCTGCAGATGGCCCTTGA
 CCTCTGGCCAACAAGGAGAAGAAAGACTCCATCACGGGGCTGCAGACGCGCACCCAGCCTGGGCGGCC
 GACTGGAGCAAGGTGTTCCAGAAAGTGGCTGCTGAGAAGAAGGCAAGGTGCAGGTCTTCTTCTGTGGCT
 CCCCAGCTCTGGCCAAGGTGCTGAAGGGCCATTGTGAGAAGTTCGGCTTCCAGATTTTCCAAGAGAATTT
 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214207 representing NM_024505
Red=Cloning site Green=Tags(s)

MSAEEDARWLRWVTQQFKTIAGEDGEISLQEFKAALHVKESFFAERFFALFSDRSRGTITLQELQEQALTL
 LIHGSPMDKLFQVYDIDVCARQASAGTEWGAGAGPHWASSPLGTGSGSIDPDELRTVLQSCRESA
 ISLPDEKLDQLTLALFESADADNGAITFEELRDELQRFPGVMENLTISAHWLTAPAPRPRRPRRQLT
 RAYWHNHRSQLFCLATYAGLHVLLFGLAASAHRLDGASVMVAKGCGQLNFDCSFI AVLMLRRLTTLWRA
 TWLAQVPLDQNIQFHQLMGYVVVGLSLVHTVAHTVNFVLQAQAEASPFQFWELLTTRPGIGWVHGSAS
 PTGVALLLLLLL MFICSSCIRRSRSGHFEVFWTHLSYLLVWLLLI FHGPNFWKWL LVP GILFFLEKAI GL
 AVSRMAAVCIMEVNLLPSKVTHLLIKRPPFFHYRPGDYLNIPTIARYEWHPTISSAPEQKDTIWLHI
 RSQGQWTNRLYESFKASDPLGRGSKRLRSVTRKSRSSKGSEILLEKHKFCNIKCYIDGPGYTPTRRI
 FASEHAVLIGAGIGITPFASILQSIMYRHQKRKHTCPSCQHSWIEGVQDNMMLKHKVDFIWINRDQRSFEW
 FVSL LTKLEMDQAEAAQYGRFLELHMYMTSALGKNDMKAIGLQMALDLLANKEKKDSITGLQTRTQGRP
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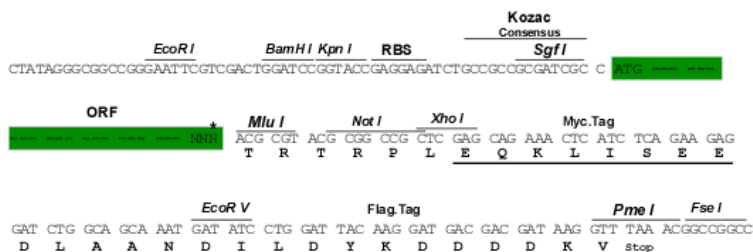
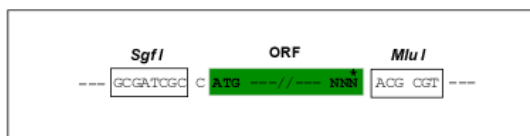
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6162_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



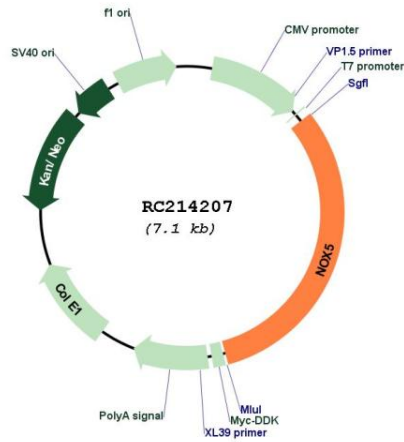
* The last codon before the Stop codon of the ORF

ACCN: NM_024505

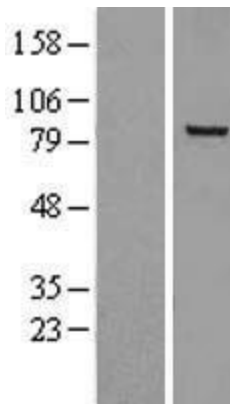
ORF Size: 2241 bp

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:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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:	<p>NM_024505.2, NP_078781.2</p>
RefSeq Size:	<p>2582 bp</p>
RefSeq ORF:	<p>2298 bp</p>
Locus ID:	<p>79400</p>
UniProt ID:	<p>Q96PH1</p>
Cytogenetics:	<p>15q23</p>
Protein Families:	<p>Ion Channels: Other, Transmembrane</p>
MW:	<p>84.5 kDa</p>
Gene Summary:	<p>This gene is predominantly expressed in the testis and lymphocyte-rich areas of spleen and lymph nodes. It encodes a calcium-dependen NADPH oxidase that generates superoxide, and functions as a calcium-dependent proton channel that may regulate redox-dependent processes in lymphocytes and spermatozoa. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Oct 2011]</p>

Product images:



Circular map for RC214207



Western blot validation of overexpression lysate (Cat# [LY402996]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214207 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).