

Product datasheet for **RR205362**

Pyroxd1 (NM_001004234) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pyroxd1 (NM_001004234) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pyroxd1
Synonyms:	MGC94881
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR205362 representing NM_001004234
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGGCCGCGCACCAGGACATTCGTGGTGGTGGAGGGCGCATCGCTGGCGTCACGTGTGCCG
 AGCAGCTGGCTATTAATTTCCCGCAGAAGACATTCTCCTGGTCACAGCCTCTCCTGTTATCAAAGCAGT
 TACAAACTTCAAACAGGTGTCTAAAGTACTGGAAGAATTTGATGTTGAAGAACAGCCAAGCACCATGCTG
 GAAATCGCTTTCCCAACATTAAGGTACATAGAATCTGGAGTAAAGCAGCTGAAGAGTGACAAGCACTGCA
 TCTTCACAGAAGATGGCCGTGAGTATGTGTATAAGAACTCTGCCTGTGTGCTGGAGCTAAGCCAAAGTT
 AATCTGCGAGGGAAATCCCTATGTACTGGGATCCGTGATACAGACAGTCTCAGGAATTCAGAAAACAG
 CTTACAAAAGCCAGGAGAATAATGATTGTCGGGAATGGTGGCATTGCTCTGGAGCTGGCGTATGAAGTCG
 AAGTCTGTGAAGTATTTGGGCCATAAAGGATAAAGCCATTGAAATACATTCCTTTGATGCGGGCGCAGC
 AGAGTTTTTGACTTCCAGGCTCCTGTCTGAAAAATCGGAGGCTAAACTTGCACACAAAAGAACGATCTAC
 ACAGTCAAGAAGCAAAAAGGAAACCAGTACCAAATCTAAAGCCGATTATGTGGCAGTGCCCTTGGAC
 CAGACTGGCATGGAGGCTTGGCTTTGAAAGGAACAGAGGAGTTTTCTCACAGTATTCACATTGAAACCAA
 ATGTGAAGTAAAGAAAATCTACCTTCAAGAGGAGTTAAGATTATGAAGAAAAATCCTTGGCTTTTCCA
 AAGGATCACCAATAAGTCAGTTACAGTTGATAAAGAAATGTGGCCTGTGTATGTGGAATGACGAACGGCA
 GCATATACGGCTGTGATTTCTTGTGACGCTACAGGAGTCAACCCAAATGTGCAGCCGTTTCTCCATGG
 AAACGATTTTGACCTAGGAGAAGATGGCGGCTGAGAGTAGATGAGCAGATGCGCAGTCACTTCTGAT
 ATCTATGCTGCTGGAGACATCTGTACTGCATGCTGGCCGCAAGCCAGTCTGGCAGCAGATGAGACTGT
 GGACGCAGGCACGGCAGATGGGGTCTATGCAGCCAAGTGCATGGCTGCAGCTACTATGGGGCATCTAT
 TGACATGGACTTTCAGCTTTGAACTGTTTGCTCATGTCACTAAATTTTTTAACTATAAGGTTGTGCTGCTA
 GGCAAATACAACGCACAAGGCTGGGTGTGGACCAGGTTAATGCTGAGGTGCCACAGGGGACAGGAGT
 ACATCAAAGTCGTATGCACAACGGACGCATGATGGGAGCTGTCTTAATTGGTAAAAGTACTTGGAGGA
 GACATTTGAAAATTAATTTTAAACCAAATGGACCTTTCATCATACGGGGAGGATCTGCTAAATCCAGAT
 ATCGATATAGAGGATTATTTTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR205362 representing NM_001004234
 Red=Cloning site Green=Tags(s)

MEARPAGTFVVVGGGIAGVTCAEQLAINFPAEDILLVTASPVKAVTNFKQVSKVLEEFDVVEEQPSTML
 ENRFPNIKVIESGVKQLKSDKHCIFTEGREYVYKKLCLCAGAKPKLICEGNPYVLGIRDTDSAQEFQKQ
 LTKARRIMIVGNGGIALELAYEVEVCEVIWAIKDKAIGNTFDAGAAEFLTSRLLSEKSEAKLAHKRTIY
 TVEEAKKETSTKSKADYVGSALGPDWHGGLALKGTEEFSHSIHIETKCEVKKIYLQEEFKIMKKKSLAFP
 KDHHKSVTVDKEMWPVYVELTNGSIYGCDFLVSATGVTPNVQPFLHGNDLFDLGEDGGLRVDEQMRSLPD
 IYAAAGDICTACWPPSPVWQMRLLWTQARQMGCYAAKMAAATMGHPIDMDFSFELFAHVTKFFNYKVLL
 GKYNQGLGVDHELMLRCTRQGEYIKVVMHNGRMMGAVLIGETDLEETFENLILNQMDLSSYGEDLLNPD
 IDIEDYFD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

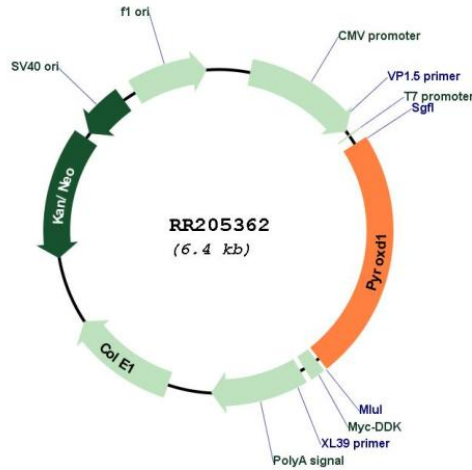
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001004234

ORF Size: 1494 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:	<u>NM_001004234.1</u> , <u>NP_001004234.1</u>
RefSeq Size:	1781 bp
RefSeq ORF:	1497 bp
Locus ID:	297708
UniProt ID:	<u>Q68FS6</u>
Cytogenetics:	4q44
MW:	55.5 kDa
Gene Summary:	Probable FAD-dependent oxidoreductase; involved in the cellular oxidative stress response (By similarity). Required for normal sarcomere structure and muscle fiber integrity (By similarity).[UniProtKB/Swiss-Prot Function]