OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC226832

Nmral1 (NM_001290762) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nmral1 (NM_001290762) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Nmral1
Synonyms:	1110025F24Rik; AI256624
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC226832 representing NM_001290762 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCTGATAGGAAACTGGTGGTGGTTTTTGGAGCCACAGGTGCGCAAGGTGGCTCTGTGGCCCGTGCAT TGCTAGAAGATGGGACATTCAGGATTCGAGTGGTAACAAGAAACCCTGAGCAGAGGGCAGCCAAAGAGCT GAAGCAGCAAGGTGCTGAGGTAGTGCGAGGAGACCAGGACGATGCAGCTAGCATGGAGCTGGCCTTGGCT GGAGCCCATGCCACCTTCATTGTGACCAATTACTGGGAGACGTGCAGCCAGGACCGAGAAGTGCAGCAGG GCAAGCTTCTAGCCGATCTAGCCAAACGCTTGGGCCTCCATTATGTAGTGTACAGTGGCCTGGAGAACAT CAGGAAGCTGACGGCTGGGAAGCTGGCCGCAGGACACTTTGATGGCAAAGGGGAGGTGGAGGAATACTTC CGAGACATCGGTGTTCCCATGACCAGTGTGCGGCTGCCTTGCTATTTCGAGAATCTCCTTTCCTATTTCC TGCCCCAGAAAGCTGCAGATGGAAAAAGCTTCTTGCTGGACTTGCCCATGGGTGACGTCCCCATGGATGG AATGTCTGTGAGTGACCTGGGCCCCGTGGTGCTCAGCTTGCTGAAGAAGCCAGAAGAGTACGTAGGGCAG AACATCGGGCTCAGTACCTGCAGGCACACCGCAGAGGAGTATGCTGCCTTGCTTAGCAAGCACACTGGCA AGGCTGTACATCATGCCAAGGACTCTGGAGGAAGCCAGTCTTCCTGGCATCACCAAGGCTGTAGAGGAGA CAGACATGGTGGATTCTCTGTTTCCAGACAACTCCTGAGGATTACGAGAAACTTGGTTTCCAGGGGGCTC AAGACTTGGCCAACATGTTCCGTTTCTACACCCTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Restriction Sites:	SgfI-MluI
ACCN:	NM_001290762
Insert Size:	876 bp

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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001290762.1, NP_001277691.1
RefSeq Size:	1530 bp
RefSeq ORF:	876 bp
Locus ID:	67824
UniProt ID:	Q8K2T1
Cytogenetics:	16 2.46 cM
Gene Summary:	Redox sensor protein. Undergoes restructuring and subcellular redistribution in response to changes in intracellular NADPH/NADP(+) levels. At low NADPH concentrations the protein is found mainly as a monomer, and binds argininosuccinate synthase (ASS1), the enzyme involved in nitric oxide synthesis. Association with ASS1 impairs its activity and reduces the production of nitric oxide, which subsecuently prevents apoptosis. Under normal NADPH concentrations, the protein is found as a dimer and hides the binding site for ASS1. The homodimer binds one molecule of NADPH. Has higher affinity for NADPH than for NADP(+). Binding to NADPH is necessary to form a stable dimer (By similarity).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (3) lacks an in-frame exon in the 5' coding region and uses an alternate splice site in the 3' coding region, which results in a frameshift, compared to variant 1. It encodes isoform 3, which has a shorter and distinct C-terminus, compared to isoform 1.