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Product datasheet for MR210370

Prox1 (NM_008937) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prox1 (NM_008937) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prox1
Synonyms:	A230003G05Rik; PROX-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR210370 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTGACCATGACAGCACAGCCCTCTTAAGCCGGCAAACCAAGAGGAGAAGGGTTGACATTGGAGTGA
AAAGGACGGTAGGGACAGCATCTGCATTTTTTGCTAAGGCAAGGGCAACATTTTTCAGTGCCATGAATCC
CCAAGGTTCAGAGCAGGATGTTGAATATTCTGTGGTGCAACACGCAGATGGGGAAAAGTCGAACGTACTC
CGCAAGCTGCTGAAGAGGGCGAACTCGTATGAAGATGCCATGATGCCTTTTCCAGGAGCAACTATAATTT
CCCAGCTGTTGAAAAATAACATGAACAAAAACGGTGGCACCGAGCCCAGTTTCCAAGCCAGCGGACTCTC
TAGCACAGGCTCCGAAGTACATCAGGAGGATATATGTAGCAACTCTTCAAGAGACAGCCCCCCAGAGTGT
CTTTCCCCTTTTGGCAGGCCTACTATGAGCCAGTTTGATGTGGATCGCTTATGTGATGAGCACCTGAGAG
CAAAGCGCGCCCGGGTTGAGAATATCATTCGGGGTATGAGCCATTCCCCCAGTGTGGCATTAAGGGGCAA
TGAAAACGAAAGAGAGATGGCCCCGCAGTCTGTGAGTCCCCGAGAAAGTTACAGAGAAAACAAACGCAAG
CAGAAGCTGCCCCAGCAGCAGCAACAGAGTTTCCAGCAGCTGGTTTCAGCCCGAAAAGAACAGAAGCGAG
AGGAGCGCCGACAGCTGAAACAGCAGCTGGAAGACATGCAGAAGCAGCTGCGCCAGCTGCAGGAGAAGTT
CTACCAGGTCTATGACAGCACAGACTCCGAAAATGATGAAGATGGCGACCTGTCTGAAGACAGCATGCGC
TCGGAGATCCTGGATGCACGGGCCCAGGACTCGGTGGGGCGCTCAGACAATGAGATGTGTGAGCTGGACC
CAGGGCAGTTCATCGACAGGGCCCGAGCCCTAATCAGGGAGCAGGAGATGGCTGAGAACAAGCCTAAGCG
AGAAGGCAGCAACAAAGAAAGAGACCACGGGCCAAACTCCTTGCAGCCAGAAGGCAAGCATCTGGCAGAG
ACCTTAAAACAGGAGCTGAACACGGCCATGTCGCAGGTTGTGGACACGGTGGTCAAAGTCTTCTCAGCCA
AACCCTCTCGCCAGGTTCCTCAGGTCTTCCCACCTCTCCAGATCCCCCAGGCCAGATTCGCAGTCAACGG
GGAAAACCACAATTTCCACACGGCCAACCAGCGCCTGCAATGCTTTGGTGATGTCATCATTCCGAACCCC
TTGGACACCTTTGGCAGTGTGCAGATGCCTAGTTCCACAGACCAGACGGAAGCCCTTCCCCTGGTGGTCC
GAAAAAACTCATCCGAGCAATCTGCCTCTGGCCCGGCCACTGGCGGCCACCACCAGCCCCTGCACCAGTC
ACCCCTCTCCGCCACTGCAGGCTTCACCACCCCTAGCTTCCGCCATCCCTTTCCCCTGCCCTTGATGGCT
TATCCATTTCAGAGTCCACTAGGTGCTCCCTCCGGCTCCTTCTCGGGGAAGGACAGAGCCTCTCCTGAGT
CCTTAGACTTGACTCGGGACACAACAAGTCTGAGGACCAAGATGTCATCACACCATCTGAGCCACCACCC
CTGTTCACCAGCACACCCACCCAGCACCGCAGAAGGACTCTCTTTGTCACTCATAAAGTCTGAGTGTGGA
GATCTTCAAGATATGTCCGACATCTCACCTTATTCAGGAAGCGCAATGCAGGAAGGGCTATCACCCAATC
ACTTGAAAAAGGCAAAACTCATGTTCTTTTACACCCGCTACCCCAGCTCCAACATGCTGAAGACCTACTT
CTCGGACGTGAAGTTCAACAGATGCATTACCTCGCAGCTCATCAAGTGGTTCAGCAATTTCCGTGAGTTT
TACTATATCCAGATGGAGAAGTATGCGCGTCAAGCCATCAATGATGGAGTCACCAGTACAGAAGAGCTCT
CCATCACCAGGGATTGTGAGCTATACCGAGCCCTCAACATGCACTACAACAAAGCAAATGACTTTGAGGT
TCCAGAGAGATTCCTGGAAGTTGCGCAGATCACGTTACGGGAGTTTTTCAATGCCATCATCGCGGGCAAA
GATGTTGATCCTTCCTGGAAGAAGGCCATTTACAAGGTCATCTGCAAGCTGGATAGTGAAGTTCCTGAGA
TTTTCAAATCCCCTAACTGCCTACAAGAACTCCTTCACGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

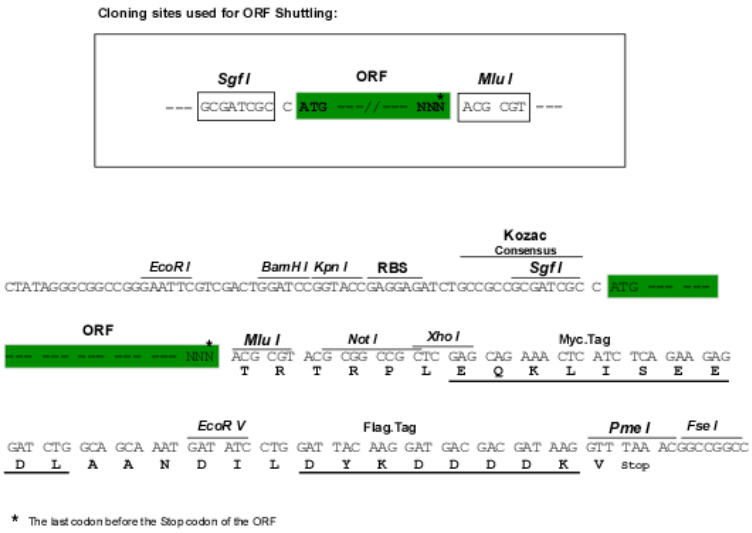
>MR210370 protein sequence
Red=Cloning site Green=Tags(s)

MPDHDSTALLSRQTKRRRVDIGVKRTVGTASAFFAKARATFFSAMNPQGSEQDVEYSVVQHADGEKSNVL
RKLLKRANSYEDAMMPFPGATIISQLLKNNMNKNGGTEPSFQASGLSSTGSEVHQEDICSNSSRDSPPEC
LSPFGRPTMSQFDVDRLCDEHLRAKRARVENIIRGMSHSPSVALRGNENEREMAPQSVSPRESYRENKRK
QKLPQQQQQSFQQLVSARKEQKREERRQLKQQLEDMQKQLRQLQEKFYQVYDSTDSENDEDGDLSEDSMR
SEILDARAQDSVGRSDNEMCELDPGQFIDRARALIREQEMAENKPKREGSNKERDHGPNSLQPEGKHLAE
TLKQELNTAMSQVVDTVVKVFSAKPSRQVPQVFPPLQIPQARFAVNGENHNFHTANQRLQCFGDVIIPNP
LDTFGSVQMPSSTDQTEALPLVVRKNSSEQSASGPATGGHHQPLHQSPLSATAGFTTPSFRHPFPLPLMA
YPFQSPLGAPSGSFSGKDRASPESLDLTRDTTSLRTKMSSHHLSHHPCSPAHPPSTAEGLSLSLIKSECG
DLQDMSDISPYSGSAMQEGLSPNHLKKAKLMFFYTRYPSSNMLKTYFSDVKFNRCITSQLIKWFSNFREF
YYIQMEKYARQAINDGVTSTEELSITRDCELYRALNMHYNKANDFEVPERFLEVAQITLREFFNAIIAGK
DVDPSWKKAIYKVICKLDSEVPEIFKSPNCLQELLHE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008937

ORF Size: 2214 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_008937.3

RefSeq Size: 4148 bp

RefSeq ORF: 2214 bp

Locus ID: 19130

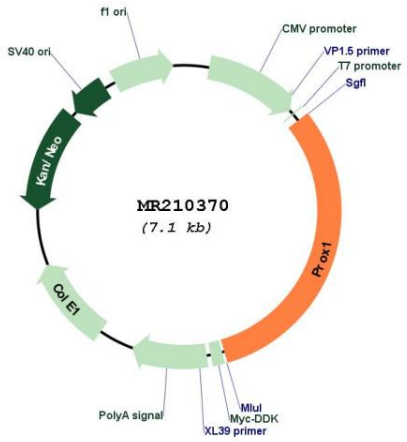
UniProt ID: P48437

Cytogenetics: 1 95.85 cM

MW: 83.1 kDa

Gene Summary: Transcription factor involved in developmental processes such as cell fate determination, gene transcriptional regulation and progenitor cell regulation in a number of organs. Plays a critical role in embryonic development and functions as a key regulatory protein in neurogenesis and the development of the heart, eye lens, liver, pancreas and the lymphatic system. Involved in the regulation of the circadian rhythm. Represses: transcription of the retinoid-related orphan receptor RORG, transcriptional activator activity of RORA and RORG and the expression of RORA/G-target genes including core clock components: ARNTL/BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210370