

Product datasheet for **MG210370**

Prox1 (NM_008937) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prox1 (NM_008937) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Prox1
Synonyms:	A230003G05Rik; PROX-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210370 representing NM_008937
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGCCTGACCATGACAGCACAGCCCTCTTAAGCCGGCAAACCAAGAGGAGAAGGGTTGACATTGGAGTGA
AAAGGACGGTAGGGACAGCATCTGCATTTTTGCTAAGGCAAGGGCAACATTTTTAGTGCCATGAATCC
CCAAGGTTTCAGAGCAGGATGTTGAATATTCTGTGGTGCAACACGCAGATGGGGAAAAGTCGAACGTA
CGCAAGCTGCTGAAGAGGGCGAACTCGTATGAAGATGCCATGATGCCTTTCCAGGAGCAACTATAATTT
CCCAGCTGTTGAAAAATAACATGAACAAAAACGGTGGCACCAGCCAGTTTCCAAGCCAGCGGACTCTC
TAGCACAGGCTCCGAAGTACATCAGGAGGATATATGTAGCAACTCTTCAAGAGACAGCCCCCAGAGTGT
CTTTCCCTTTTGGCAGGCTACTATGAGCCAGTTTGATGTGGATCGCTTATGTGATGAGCACCTGAGAG
CAAAGCGCGCCCGGTTGAGAATATCATTGGGGTATGAGCCATTCAGCCAGTGTGGCATTAAAGGGGCAA
TGAAAACGAAAGAGAGATGGCCCGCAGTCTGTGAGTCCCGAGAAAGTTACAGAGAAAACAACGCAAG
CAGAAGCTGCCAGCAGCAGCAACAGAGTTTCCAGCAGCTGGTTTCAGCCCGAAAAGAACAAGAAGCGAG
AGGAGCGCCGACAGCTGAAACAGCAGCTGGAAGACATGCAGAAGCAGCTGCGCCAGCTGCAGGAGAAGTT
CTACCAGTCTATGACAGCACAGACTCCGAAAATGATGAAGATGGCGACCTGTCTGAAGACAGCATGCGC
TCGGAGATCCTGGATGCACGGGCCAGGACTCGGTGGGGCGCTCAGACAAAGAGATGTGTGAGCTGGACC
CAGGGCAGTTCATCGACAGGGCCGAGCCCTAATCAGGGAGCAGGAGATGGCTGAGAACAAGCCTAAGCG
AGAAGGCAGCAACAAAGAAAGAGACCACGGGCCAACTCCTTGCAGCCAGAAGGCAAGCATCTGGCAGAG
ACCTTAAACAGGAGCTGAACACGGCCATGTCGAGGTTGTGGACACGGTGGTCAAAGTCTTCTCAGCCA
AACCCCTCGCCAGGTTCTCAGGTTCTCCACCTCTCCAGATCCCCAGGCCAGATTGCGAGTCAACGG
GGAAAACCAACAATTTCCACACGGCCAACCAAGCCCTGCAATGCTTTGGTGATGTCATCATTCCGAACCCC
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CCTTAGACTTGACTCGGGACACAACAAGTCTGAGGACCAAGATGTCATCACACCATCTGAGCCACCACC
CTGTTACCAGCACACCCACCAGCACCAGCAGAAAGGACTCTCTTGTCACTATAAAGTCTGAGTGTGGA
GATCTTCAAGATATGTCCGACATCTCACCTTATTCAGGAAGCGCAATGCAGGAAGGGCTATCACCCAATC
ACTTGAAAAGGCAAACTCATGTTCTTTTACACCCGCTACCCAGCTCCAACATGCTGAAGACCTACTT
CTCGGACGTGAAGTTCAACAGATGCATTACCTCGCAGCTCATCAAGTGGTTCAGCAATTTCCGTGAGTTT
TACTATATCCAGATGGAGAAGTATGCGCGTCAAGCCATCAATGATGGAGTACCAGTACAGAAGAGCTCT
CCATCACCAGGGATTGTGAGCTATACCGAGCCCTCAACATGCACTACAACAAAGCAAATGACTTTGAGGT
TCCAGAGAGATTCCTGGAAGTTGCGCAGATCACGTTACGGGAGTTTTTCAATGCCATCATCGCGGGCAA
GATGTTGATCCTTCTGGAAGAAGGCCATTTACAAGGTATCTGCAAGCTGGATAGTGAAGTTCCTGAGA
TTTTCAAATCCCCTAACTGCCTACAAGAACTCCTTCACGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210370 representing NM_008937
 Red=Cloning site Green=Tags(s)

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MPDHDSTALLSRQTKRRRVDIGVKRTVGTASAFFAKARATFFSAMNPQGSEQDVEYSVVQHADGEKSNVL
RKLLKRANSYEDAMPPFGATIIISQLLKNMKNNGGTEPSFQASGLSSTGSEVHQEDICSNSSRDSPEEC
LSPFGRPTMSQFDVDRLCDEHLRAKRARVENIIRGMSHSPSVALRGNENEREMAPQSVSPRESYRENKRK
QKLPQQQQSFQQLVSARKEQKREERRQLKQLEDMQQLRQLQEKFYQVYDSTDSSENDEDGLSEDSMR
SEILDARAQDSVGRSDNEMCELDPGQFIDRARALIREQEMAENKPKREGSNKERDHGPNSLQPEGKHLAE
TLKQELNTAMSQVVDTVVKVFSAKPSRQVPQVFPPLQIPQARFAVNGENHNFHTANQRLQCFGDVPIPND
LDTFGSVQMPSSDQTEALPLVVRKNSSEQSASGPATGGHHQPLHQSPLSATAGFTTSPFRHPFPLPLMA
YPFQSPLGAPSGFSKDRASPELSDLTRDTTSLRDKMSSHLSHHPSPAHPPSTAEGLSLSLIKSECG
DLQDMSDISPYSGSAMQEGLSPNHLKAKLMFFYTRYPPSNMLKTYFSDVKFNRCITSQLIKWFSNFRF
YYIQMEKYARQAINDGVTSTEELSTRDCELYRALNMHYNKANDFEVPERFLEVAQITLREFFNAIAGK
DVDPSWKKAIYKVICLKDSEVPEIFKSPNCLQELLHE
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008937

ORF Size: 2211 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

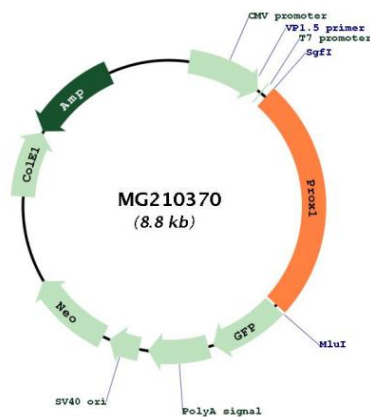
Locus ID: 19130

UniProt ID: [P48437](#)

Cytogenetics: 1 95.85 cM

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 MG210370