

Product datasheet for MC224380

Prx (NM_198048) Mouse Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Prx (NM_198048) Mouse Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Prx |
| Synonyms: | L-Periaxin |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Fully Sequenced ORF: | >MC224380 representing NM_198048 Red=Cloning site Blue=ORF Orange=Stop codon |

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGCCAGGAGCCGACGCGCTGAGGAGCTGAGACGGGCGGAGTTGGTGGAGATTATCGTGGAGACCG
AGGCACAGACCGGGTCAAGCGCTTCAACGTAGCAGGCGCGCAAGAAGGAATCTTTGTCGTGAGCT
GCGAGAGGACTACCGGCAGCTAAGAGCCTCAGCTTGAAGAAGGGACCAGCTGCTGAGTGCCCGTGTG
TTCTTTGAGAATTCAAATATGAGGATGCACTTCGCTGCTGCAATGCGCAGAGCCCTACAAGTCTCCT
TCTGCTGAAGCGCACTGTGCCACCGGGATCTGGCACTGAGGCCCGGACGGTGTCTGGATACGAGAT
GAAGGGCCACCGGCCAAAGTGGCCAAGCTGAACATCCAGAGTCTGGCCCTGTGAAGAAGAAGAAGATG
GTGACTGGGGCCCTGGGGACCCCTGCAGATTTGGCCCTGTTGACGTGCGATTCTCTTTTCCCAAGTTCT
CCCGACTGCGTCGGGGTCTCAAAGCCGAGGCTGTCAAGGGACCTGTCCAGCTGCCCCAGCCCGTCGCCG
CCTCCAGCTGCCTCGGCTGCGTGTCCGAGAAGTAGCTGAAGAGGCCAGGTAGCCCGAATGGCTGCTGCT
GCTCCTCCCCAAGGAAGGCCAAGGCAGAAGCTGAGGCAGCCACAGGAGCTGGGTTACAGCCCTCAGT
TAGAGCTAGTTGGGCTCGGCTGCTAGTGCCGAGGTGGTGTCCCTCAGGTCTCAGTTCCTCAAGGGGAC
CCCATCAACAGAGGCAGCCAGCGGCTTTGCCCTCACCTGCCAACCTTGGGCTAGGTGCCCCAGCTGCA
CCGGCTGTGGAGCCCCAGCCACGGGAATCCAGTTCCACAAGTGAAGTCCCCACCTGCCCTCTCTAC
CCTCTTCCACACTTCCATGCCTGGACACCCAGGAAGGAGCTGCAAGTGGTAAAAGTCCCTACCTGGA
TGTGGCAGCTCCGTCTATGGGGGTGGACCTGGCTTTGCCGGTGCAGAGGTGGAGGCCAGGAGAGGTT
CCTGAAGTGGCCCTCAAGATGCCCGGCTCAGTTTCCCCGTTTTGGGATTGGGGGAAGGAAGCCACTG
AAGCCAAAGTAGTCAAGGGCAGCCCTGAGGCCAAAGCAAGGGTCCAGACTTCGAATGCCACCTTTGG
GCTTTCTCTCCTGGAACCCCGCCCTCTGGCCCTGAAGCTGTTGCTGAGAGCAAGCTGAAGCTACCCACC
CTCAAGATGCCCTCTTTGGCATTGGTGTGACTGGGCTGAGGTCAAGGCACCCAAGGGGCCGAAGTAA
AGCTCCCTAAGGTTCTGAGGTCAAACCTCCGAAAGTGCCCGAGGCAGCCATTCCAGATGTGCAACTCCC
TGAGGTACAGCTGCCCAAATGTCAGACATGAACTTCCAAAGATCCCTGAGATGTTGTACCCGACGTT



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CGTCTCCGGAAGTGCAGCTGCCAAAGTCCCTGAGATGAAAGTCCCAGAGATGAAGTCCCAGAGGTGC
 CCGAGATGGCCGTGCCGATGTACACCTTCCAGATGTACAGCTCCCGAAAGTCCCAGAGATGAAGTCCC
 GAAGGTGCCGAGATGGCCGTGCCGATGTACACCTTCCAGATGTACAGCTCCCGAAAGTCCCAGAGATG
 AAGTACCAGAGATGAAGTCCCAGAGTGGCCGATGGCCGTGCCGATGTACAGCTCCCGAAAGTCCCAGAGATG
 AGCTGCCAAAGTGTCTGAGGTGAAGTCCCAGATGCCTGAGATGGCCGTGCCGATGTACAGCTCCCGAAAGTCCC
 GGAGTACAACCTCCCAAAATGTCCGAGGTGAAGTCCCAGATGAAACTCCCTAAGATGCCAGAGATGACCATGC
 CGCATTCCGCTCCAGAAAGTTCAGTTGCCAAAGTGCCTGACATTAACCTTCCGAAATGAAGCTTCC
 AGAAATAAACTCCCAAGTGCCTGACATGGCAGTGCCTGATGTCCCTTCCAGAGCTGCAGTGCCT
 AAAGTGTGCGACATTCGGCTGCCTGAAATGCAAGTGTACAGGTCCCAGAGGTGCAGCTTCCCAAGATGC
 CAGAGATGAAGTTGTCAAGTTCTGAGGTACAGAGGAAATCTGCAGGGCGGAGCAGGCAAAAGGGAC
 TGAATTTAGTTTCAAGTTGCCAAGATGACCATGCCAAGTTGGGAAAGTGGCAAGCTGGGGAGGCA
 AGTATTGAGTTCCAGACAACTCATGACACTTCCCTGTCTGCAGCCAGAGGTGGCACTGAGGCATCCC
 ATGTTGGTGTCCCTTCCCTCTCTCCCTCTGTGGAGCTTGACTTGCCTGGGGCCCTGGCCTGGAGGG
 ACAAGTCCAAGAAGCTGTCCAGGCAAAGTGGAGAAGCCAGAGGGCCCCAGGGTAGCAGTGGGTGTTGGA
 GAGGTGGCTTTCGTGTGCCCTCTGTGGAGATTGCACTCCTCAGCTGCCACAGTTGAAGTTGAGAAAG
 AGCAGCTAGAGATGGTGGAGATGAAAGTCAAACCTCTTCCAAGTTCTCTCTGCCAAATTCGGACTTTC
 AGGGCCCAAAGCTGTCAAGGGAGAGGTGGAGGGCCCTGGGCGAGCCACCAAGCTGAAGTTTCCAAGTTT
 ACCATCTCACTTCCCAAAGCTCGAGCAGGGACTGAGGCCGAAGCGAAGGGAGCTGGGGAAGCCGGTTGC
 TGCCAGCGCTGGATCTGTCCATCCCACAGCTCAGCCTGGATGCCAGCTGCCCTCAGGCAAGGTGGAAGT
 AGCTGATAGCAAGCCTAAATCGTCCAGATTTGCTCTGCCAAGTTTGGGTGAAAGGCCGGGACTCTGAG
 GCTGATGACTGGTGGCAGGGGAGGCTGAGCTTGAAGGAAAGGTTGGGGCTGGGATGGGAAGGTGAAGA
 TGCCCAAGCTGAAAATGCCATCTTTGGTTGTCCCGAGGAAAGGAAGCAGAAACTCAGGATGGACGTGT
 CAGCCCCGGGAAAAGCTGGAGGCCATAGCTGGGCAGCTTAAGATCCCTGCGGTGGAATTTGTCACACCG
 GGAGCTCAGGAGACAGAGAAGGTCAACAGTGGAGTGAAGCCGTCAGGCCCTCAGGTGTCCACCCTGGGC
 AGGTGGTTGCAGAGGGCCAGGAGAGTGTGCAGAGGGTGTCCACACTAGGTATCTTTGCCCCAGGTGGA
 ATTGGCCAGCTTTGGGAGGCAGGCCCTGAGATCGTAGCCCTTCTGCAGAGGGCACAGCAGGCTTAGG
 GTCCAGGTGCCACAGGTGATGCTGGAGCTACCTGGAACCCAGGTGGCAGGGGGTATCTGTTAGTGGGTG
 AGGGCATCTTCAAGATGCCACAGTGCAGTGCCTCAGCTAGAGCTGGATGTGGGCTGGGCCATGAAGC
 CCAGGCTGGTGAAGCAGCAAGAGTGAAGGTGGGATAAAGTTGAAGTTGCCACACTGGGACCGGAAGC
 AGAGGAGAGGGCTTGAAGCCAGGGCCCCAGGGCCAGCGCACCTTCCACTCTCATTGCCGATGTGG
 AACTCACGTACCAAGTGAAGTACAGTGCAGTGCCTCAGCTAGAGTACCAGGTAGTTGAGGGTATGGGGATGGTGGGACAA
 ACTCAAGTTTCGGCTGCCCTGTTTGGTCTGGCAAAGGCCAAGGAAGGGATAGAAGTTGGAGAAAAGGCT
 AAGAGTCCAAAGCTCAGGCTACCCGAGTGGGCTTCCAGCCAGAGTGAAGTCCGGTCTCCGGAGAAGGCTCTC
 CAAGTCTGAGGAGGAGGAAGAGGCAAGTGGGGAAGGGCTTCCAGTCCCGGGGTAGGGTAAGGGTCCG
 CCTGCCTCGGGTAGGCTTGGCTTCCCTTCTAAAGTCTCTAAGGGACAGGAGGGTATGCAACCTCCAAG
 TCCCCAGTTGGGAGAAGTACCCAAATCCGTTTCTAGGGTGTCTTAAGCCCCAAGGCCGGAGTG
 GGAGTAGGGACCGGAAGAAGGTGGATTCAAGGTCGACTGCCAGTGTGGGATTTTCAGAAACAGCAGT
 TCCAGTTCCACCAGGATTGAGGGAACCCAGGCTGCTGCCATCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
 ACCN: NM_198048
 Insert Size: 4176 bp

OTI Disclaimer: 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.

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](#)

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_198048.2](#), [NP_932165.2](#)

RefSeq Size: 4668 bp

RefSeq ORF: 4176 bp

Locus ID: 19153

UniProt ID: [O55103](#)

Cytogenetics: 7 15.91 cM

Gene Summary:

Scaffolding protein that functions as part of a dystroglycan complex in Schwann cells, and as part of EZR and AHNAK-containing complexes in eye lens fiber cells (PubMed:11430802, PubMed:21745462, PubMed:22764250). Required for the maintenance of the peripheral myelin sheath that is essential for normal transmission of nerve impulses and normal perception of sensory stimuli (PubMed:10839370). Required for normal transport of MBP mRNA from the perinuclear to the paranodal regions (PubMed:15356632). Required for normal remyelination after nerve injury (PubMed:10839370). Required for normal elongation of Schwann cells and normal length of the internodes between the nodes of Ranvier. The demyelinated nodes of Ranvier permit saltatory transmission of nerve impulses; shorter internodes cause slower transmission of nerve impulses (PubMed:15356632, PubMed:23022068). Required for the formation of appositions between the abaxonal surface of the myelin sheath and the Schwann cell plasma membrane; the Schwann cell cytoplasm is restricted to regions between these appositions (PubMed:15356632, PubMed:23022068). Required for the formation of Cajal bands and of Schmidt-Lanterman incisures that correspond to short, cytoplasm-filled regions on myelinated nerves (PubMed:23022068, PubMed:22764250). Recruits DRP2 to the Schwann cell plasma membrane (PubMed:11430802, PubMed:23022068, PubMed:22764250). Required for normal protein composition of the eye lens fiber cell plasma membrane and normal eye lens fiber cell morphology (PubMed:21745462).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the shorter transcript but encodes the longer isoform (L). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.