

Product datasheet for **MG227573**

Prx (NM_019412) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prx (NM_019412) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Prx
Synonyms: L-Periaxin
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG227573 representing NM_019412
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGGCCAGGACCGCAGCGCTGAGGAGCTGAGACGGCGGAGTTGGTGGAGATTATCGTGGAGACCG
 AGGCACAGACCGGGTCAAGCGCTTCAACGTAGCAGGCGCGGCAAGAAGGAATCTTTGTCGTGAGCT
 GCGAGAGGACTACCGGCAGCTAAGAGCCTCAGCTTGCAAGAAGGGGACCAGCTGCTGAGTGCCCGTGTG
 TTCTTTGAGAACTTCAAATATGAGGATGCACTTCGCCTGCTGCAATGCGCAGAGCCCTACAAGTCTCCT
 TCTGCTTGAAGCGCACTGTGCCACCGGGGATCTGGCACTGAGGCCCGGGACGGTGTCTGGATACGAGAT
 GAAGGGCCACCGGCCAAAGTGGCCAAGCTGGTACGCGTGCTTAGCCCGGTCCCGGTCCAGGACAGCCCC
 AGTGACCGGGTCGCTGCTGCGCCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG227573 representing NM_019412
 Red=Cloning site Green=Tags(s)

MEARSRSAEELRRAELVEIIVETEAQTVSGFNVAGGGKEGIFVRELREDSPAASLSLQEGDQLLSARV
 FFENFKYEDALRLQLCAEPYKVSFCLKRTVPTGDLALRPQTVSGYEMKGPRAKVAKLVRLSPVPVQDSP
 SDRVAAAP

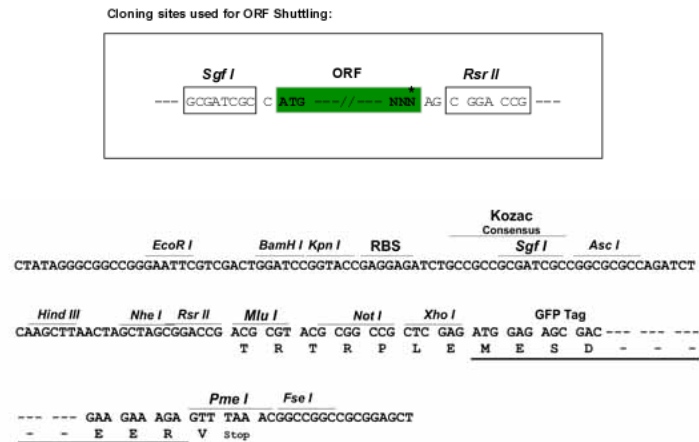
SGP**TRTRRLE** - GFP Tag - V

Restriction Sites: SgfI-RsrII



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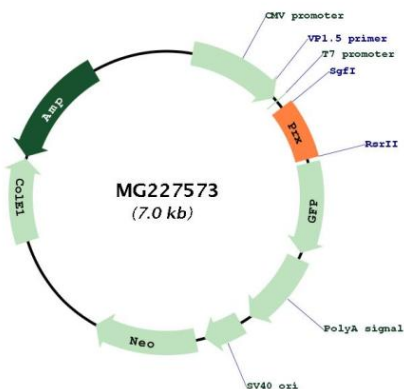
Cloning Scheme:



ACCN:	NM_019412
ORF Size:	444 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
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_019412.2, NP_062285.1</u>
RefSeq Size:	5260 bp
RefSeq ORF:	447 bp
Locus ID:	19153
UniProt ID:	<u>O55103</u>
Cytogenetics:	7 15.91 cM
Gene Summary:	<p>Scaffolding protein that functions as part of a dystroglycan complex in Schwann cells, and as part of EZR and AHNK-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]</p>

Product images:



Circular map for MG227573