

Product datasheet for **RN211227**

Jph2 (NM_001037974) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Jph2 (NM_001037974) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Jph2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >RN211227 representing NM_001037974
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCGGGGCGCTTTGACTTTGATGATGGCGGGCGTATTGTGGGGCTGGGAAGGGGGAAGGCAC
 ATGGGCACGACTGTGCACCGGCCCTAAGGGCCAAGGTGAATACTCGGGCTCCTGGAATTTGGCTTTGA
 AGTGGCAGGCGTCTACACCTGGCCAGTGGGAATACCTTTGAGGGATATTGGAGCCAGGGCAAACGACAT
 GGACTTGGCATAGAGACCAAGGGCGATGGCTCTACAAGGGGAGTGGACACATGGCTTCAAGGGCGCT
 ACGGAATCCGGCAGAGCACAACAGTGGTCCAAAGTACGAGGGCACTTGAATAACGGCTACAGGATGG
 TTATGGCAGGAGACCTATGCAGACGGAGGACCTACCAAGGCCAATCACCAACGGCATGCGGCATGGC
 TACGGCGTGCACAAAGCGTGCCTACGGGATGGCAGTGGTGGTGCCTCCCGCTGCGCACCTCGCTGT
 CCTCGCTGCGCAGCGAGCACAGCAATGGCACAGTGGCTCCAGACTCGCCGGCGGACAGCGGCCACGCT
 GCCCTTGCCCCGGTGGCGCTGGTGGCTTCGCGCTCAGCCTACTGGCCACGGCCGAGGCTGCGCGTCCC
 CAGGGGTGTTACACAGAGGCGCACTGTGGTTCGACTGCGACGCTCAGAGTACGCACGCTCGCTGGGCA
 GCCAGCGCAGCCGTTGAGCTTCTCAAGAGCGAGCTGAGCTCAGGAGCCAGCGATGCCCGTCCACCGG
 CAGCTGGCCGAAGGCGCCGAGGGCCCTGACGACGCGGTGCACCTTCGACGCCGACATCGACGCCACC
 ACCACGGAGACCTACATGGGCGAGTGAAGAACGACAACGCTCGGGCTTCGGTGTGAGCGAACGTTCCA
 GCGGCCTTCGCTACGAGGGCGAGTGGCTGGACAACCTGCGCCACGGTTACGGTTCGACCACGCTGCCCGA
 CGGCCACCGGAGGAGGGCAAGTACGCCACAATGTGCTGGTCAAGGGCACCAGCGCCGCTGTGCCG
 CTCAAGAGCAACAAGGTTCCGCCAGAAGGTGGAGCATGGGTTCGAGGTTGCCAACGCGCAGCAGCCATTG
 CGCGCCAGAAGGCTGAGATTGCTGCCTCCAGGACAAGCCATGCCAAAGCCAAGGCCGAGGCAGAGAACA
 GGCTGCCCTGGTGCACACAGGAGTCCAACATTGCCCGTACATTGGCCAAGGAGCTGGTCCAGACTTC
 TACCAGCCAGGTCGGAGTATCAGAAGCGTCGGCTGCTCCAGGAGATCCTGGAGAATCAGAGAGCTGC
 TGGAGCCCCGGGAGCGGGCCCGGGCACCGCCTCCCCGAACGGCCCCGGGAAAGCCACAGCTGCATGA
 GCGCGAGACCCCGCAGCCGGAGGGCGGACCCCTTCCCGGGCGGAACGCCCCCGCAACCAAGAGACCC
 CGGCCGGGATCGTCAAAGGACGGTCTGCTGAGTCCGGGTGCCTGGAACGGCGAGCCCGTGGAGAGGGCA
 GCCGGCCCGCCACGCCATCGGATGGCGCCGCGCTCGTAGCCCCGCGCTCCGGTTCGGAGCACATGGC
 CATCGAGGCGCTGCAGCCACCGCCGCGCCTCGCGGGAGCCTGAGGTGGCACTGTACCGCGTTACCAC
 AGCTACGCTGTGCGCACCGGGCCACCCGAGCCCCGCTTGGAGGATGAGCCCCAGCCGAGCCGAGG
 TCCCGCATCCGACTCGGAGCCCCGCTCCCCGCTCCGCCACGGTCCAGGAAGAGGAGTCCCCTGCGCC
 GCGAAGCCGGGTGCCCGCAAGCCCGCCACCTTGAGGCCAAGCCATAGTCCCCAAAGCCGAGCCCAAG
 GCCAAGGCGCGCAAGACAGAGGCCCGCGGGCTGAGCAAGGCGGGTCCAAAGAAGAAGGGCCGAAAGAAG
 TGGCACAGGAGCCGAGGCCGAGGTGGAGGTAGAGGAGTCCCCAACACCGTCTCATCTGTATGGTGTAT
 CCTGCTGAACATCGCCCTGGCTATCCTATTCTGTTACCTCTGACT**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001037974
- Insert Size:** 2079 bp
- 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).
- 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_001037974.1](#), [NP_001033063.1](#)

RefSeq Size: 2127 bp

RefSeq ORF: 2079 bp

Locus ID: 296345

UniProt ID: [Q2PS20](#)

Cytogenetics: 3q42

Gene Summary: Junctophilin-2: Membrane-binding protein that provides a structural bridge between the plasma membrane and the sarcoplasmic reticulum and is required for normal excitation-contraction coupling in cardiomyocytes. Provides a structural foundation for functional cross-talk between the cell surface and intracellular Ca(2+) release channels by maintaining the 12-15 nm gap between the sarcolemma and the sarcoplasmic reticulum membranes in the cardiac dyads. Necessary for proper intracellular Ca(2+) signaling in cardiac myocytes via its involvement in ryanodine receptor-mediated calcium ion release. Contributes to the construction of skeletal muscle triad junctions.[UniProtKB/Swiss-Prot Function]