

**Supplementary Figure-II:** Sequencing results for mitochondrial targeted Cx43 expression vector (A) forward primer (B) reverse primer.

**A**

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score = 1194 bits (621), Expect = 0.0
Identities = 621/621 (100%), Gaps = 0/621 (0%)
Strand=Plus/Minus

Query   1      ATGGGTGACTGGAGGCCCTGGGAAGCTGCTGGACAAGGTTCAAGCCTACTCCACGGCC  60
Sbjct  631     ATGGGTGACTGGAGGCCCTGGGAAGCTGCTGGACAAGGTTCAAGCCTACTCCACGGCC  572
Query   61     GGAGGGAAAGGTGTGGCTGCGGTCTCTCATTTTCAAATCTGCTCCGGGACAGCG  120
Sbjct  571     GGAGGGAAAGGTGTGGCTGCGGTCTCTCATTTTCAAATCTGCTCCGGGACAGCG  512
Query   121    GTTGAGTCAGCTTGGGTGATGAAACAGTCTGCCCTTCGCTGTAACACTCAACAACCCGGT  180
Sbjct  511     GTTGAGTCAGCTTGGGTGATGAAACAGTCTGCCCTTCGCTGTAACACTCAACAACCCGGT  452
Query   181     TGTGAAAATGTCGCTATGACAAGTCCTTCCCACATCTCACGTCGCCTCTGGGTCTT  240
Sbjct  451     TGTGAAAATGTCGCTATGACAAGTCCTTCCCACATCTCACGTCGCCTCTGGGTCTT  392
Query   241     CAGATCATATTCTGTCGTGCCAACACTCTGTACTTGGCTCACGTTCTATGTGATG  300
Sbjct  391     CAGATCATATTCTGTCGTGCCAACACTCTGTACTTGGCTCACGTTCTATGTGATG  332
Query   301     AGAAAGGAAGAGAAAGCTGAAACAAGAAAGAAGAGGGAGCTCAAAGTGGCGCAGACCGACGGG  360
Sbjct  331     AGAAAGGAAGAGAAAGCTGAAACAAGAAAGAAGAGGGAGCTCAAAGTGGCGCAGACCGACGGG  272
Query   361     GTCAACGTGGAGATGCACCTGAACGAGATTGAAATCAAGAAGTTCAAGTATGGGATTGAA  420
Sbjct  271     GTCAACGTGGAGATGCACCTGAACGAGATTGAAATCAAGAAGTTCAAGTATGGGATTGAA  212
Query   421     GAACACGGCAAGGTGAAGATGAGAGGTGGCCTGCTGAGAACCTACATCATCAGCATCCTC  480
Sbjct  211     GAACACGGCAAGGTGAAGATGAGAGGTGGCCTGCTGAGAACCTACATCATCAGCATCCTC  152
Query   481     TTCAAGTCTGTCCTCGAGGTGGCCTTCCCTGCTGATCCAGTGGTACATCTATGGGTTCAGC  540
Sbjct  151     TTCAAGTCTGTCCTCGAGGTGGCCTTCCCTGCTGATCCAGTGGTACATCTATGGGTTCAGC  92
Query   541     CTGAGTGGGTCTACACCTGCAAGAGAGATCCCTGCCCCCACCGGGTGGACTGCTTCCCTC  600
Sbjct  91      CTGAGTGGGTCTACACCTGCAAGAGAGATCCCTGCCCCCACCGGGTGGACTGCTTCCCTC  32
Query   601     TCACGTTTACGGAGAAAACC  621
Sbjct  31      TCACGTTTACGGAGAAAACC  11

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CPU time: 0.05 user secs. 0.02 sys. secs 0.07 total secs.

**B**

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Score = 1294 bits (673), Expect = 0.0
Identities = 680/681 (99%), Gaps = 1/681 (0%)
Strand=Plus/Plus

Query   469     ATCAGCATCTCTTCAAGTCTGCTTCGAGGTGGCCTTCTGATCCAGTGGTACATC  528
Sbjct  12      ATCAGCATCTCTTCA-GTCTGCTTCGAGGTGGCCTTCTGATCCAGTGGTACATC  70
Query   529     TATGGGTTCAGCTGAGTGCCTACACCTGCAAGAGAGATCCCTGCCCCCACCGGTG  588
Sbjct  71      TATGGGTTCAGCTGAGTGCCTACACCTGCAAGAGAGATCCCTGCCCCCACCGGTG  130
Query   589     GACTGCTTCTCTCACGTCACGGAGAAAACCATCTTCAATCTTCAATGCTGGTGGTG  648
Sbjct  131     GACTGCTTCTCTCACGTCACGGAGAAAACCATCTTCAATCTTCAATGCTGGTGGTG  190
Query   649     TCCCTGGTGTCTCGCTCTGAATATCATTGAGCTTCTATGCTTCTTCAAGGGCGTT  708
Sbjct  191     TCCCTGGTGTCTCGCTCTGAATATCATTGAGCTTCTATGCTTCTTCAAGGGCGTT  250
Query   709     AAGGATCGCGTAAGGGAAGAACGCGATCTTACACGCCACCGGGCCACTGAGCCCA  768
Sbjct  251     AAGGATCGCGTAAGGGAAGAACGCGATCTTACACGCCACCGGGCCACTGAGCCCA  310
Query   769     TCCAAAGACTCGCGATCTCCAAAATATGCTTACTTCAATGGCTCTTCAACCAACGGCC  828
Sbjct  311     TCCAAAGACTCGCGATCTCCAAAATATGCTTACTTCAATGGCTCTTCAACCAACGGCC  370
Query   829     CCACCTCTCACCTATGTCCTCTGGTACAAGCTGGTCACTGGTACAGAAACATTCC  888
Sbjct  371     CCACCTCTCACCTATGTCCTCTGGTACAAGCTGGTCACTGGTACAGAAACATTCC  430
Query   889     TCCCTGCCGCAATTACAACAAGCAAGCCAGCGAGCAGGAAACTGGCGAATTACAGGGCAGAG  948
Sbjct  431     TCCCTGCCGCAATTACAACAAGCAAGCCAGCGAGCAGGAAACTGGCGAATTACAGGGCAGAG  490
Query   949     CAAAATCGAATGGGCAGGGCCGAAGGACCCATCTCCAACTCCACGCCAGCCGTTGAT  1008
Sbjct  491     CAAAATCGAATGGGCAGGGCCGAAGGACCCATCTCCAACTCCACGCCAGCCGTTGAT  550
Query   1009    TTGGCTGACGACGCCAAAATGCCAAAAAGGTTGCTGCTGGACAGCAACTCCAGCCCTTA  1068
Sbjct  551     TTGGCTGACGACGCCAAAATGCCAAAAAGGTTGCTGCTGGACAGCAACTCCAGCCCTTA  610
Query   1069    GCTATCGTGGATCAGCGACCTTCCAGCAGAGCCAGCAGCCGCCAGCAGCAGACCTCGG  1128
Sbjct  611     GCTATCGTGGATCAGCGACCTTCCAGCAGAGCCAGCAGCCGCCAGCAGCAGACCTCGG  670
Query   1129    CCTGATGACCTGGAGATTAA  1149
Sbjct  671     CCTGATGACCTGGAGATTAA  691

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