Additional file 1 Design and sequence of circLphn3 overexpression plasmid

mmu_circ_0001358 overexpression plasmids were designed according to the previous report (Liu et al., 2018). The specific sequences were shown as follows:

The sequence of upstream fragment-mmu_circ_0001358-and endogenous flanking sequence-downstream fragment (exon is underlined):

1 TGGACT TAGATT TTGTTC CTAAAC AGAAAG ATTATA TATAGG TTATAT ATTCTG ATATGT
61 TTATAT GAGTGG AAAAAT TGATCA TATTTA AAATGA AATAGG CAGCAA TTACGT CTTTTC
121 TCATGA TCAAAA TACAGT AATTGC TAAAGA CTTTCT AGTCCA TTTGAT GGTTAG GTGAAA
181 TCTTTG TTCTAT TAACTT CCTTTT ATTTTT CCTAGT GGGTGA GAGATA CAGTTC TTAACT
241 GATGAA ATTTTA TACAGC ATAAAA ATAATT GCTTTT TATCTC AAATTG AGAATT ACTTTA
301 TTTCTT TTGGGG GGGTTT TATGAT TCCTTA TATTGC AAAGCC ATTTGA AATTTA ATGTAA
361 TCTGAC CTTACT ATGTGA AGCTGG GCTATT TTTCTG CCTCCT TCTCAA TCTTGT TCTATA
421 GCTGGG TGTTCC CCAAAT ACAATC TGTGCT TTGCTC CCTGTT GTTTTA GTTTAT TCTGGT
481 CCTTGG TCTCTT AAGTAC CTTTCC ATTCTT TTCATT CTAGTA ACTACC TGTTTA TCCTCC
541 AGGACC TAATTC AGATGT TACTTC TTTATG AATTTT TGAATT ATTCTT CGCCCC ATGCTC
601 CCAACA GAATTA ATAGTT CCCGTC TTTTGG TTGTCA ACATCT ATCAAT CATAGA TACGTC
661 ATAGTT ATTAAG GGTGGG GTCCAT GTGTTA TTCATC CTTGTA TCTTCT AGGACA AGCAGT
721 AGTTAA CATTTG TTGAAT TGAAAT GTTTTA AAACTC CATGCT TCAGAT GATTAA GAAATA
781 CTAGGA GGAAAA CAGACA GATAGA TGTTTA TGTTTT ATTTTC TAAAGC ACACTT CAGATC
841 CCCCGT TAATAA GTCTGA AGTCCT AAGGCA GCAAAC TTTCTT TAGTTT TATGTA ACTGGA
901 AGGCAA AATAAC ATCAGT GTTGCT ATTCAT GATGAC TTAAGC TTACAT GAATTT ACTATT
961 TCTTTC TTTTGA TTTCAG ATGCAA TAACAG AACCCA GTGTGC AGTGGT GGCAGG TCCTGA
1021 TGTATT TCCAGA CCCATG TCCGGG AACATA TAAATA CCTTGA AGTGCA GTATGA ATGTGT
1081 CCCTTA TAAAGT GGAACA AAAAGT TTTTCT TTGTCC TGGACT GCTAAA AGGAGT GTACCA
1141 GAGTGA ACACTT GTTTGA ATCTGA CCACCA ATCTGG GGCATG GTGCAA GGACCC TCTACA
1201 GGCTTC TGACAA GATTTA CTATAT GCCCTG GACTCC CTACAG AACTGA CACCCT GACAGA
1261 GTATTC GTCCAA AGATGA CTTCAT TGCTGG AAGGCC AACAAC TACCTA CAAGCT CCCTCA
1321 CAGAGT GGATGG CACTGG ATTTGT AGTATA CGATGG TGCCCT CTTCTT CAACAA GGAGCG
1381 GACAAG GAACAT TGTAAA GTTTGA TTTGAG GACTAG GATAAA GAGTGG AGAGGC AATCAT
1441 AGCAAA TGCTAA TTACCA TGACAC CTCCCC ATACCG ATGGGG TGGCAA GTCCGA CATAGA
1501 CTTGGC AGTGGA TGAAAA TGGATT ATGGGT AATCTA TGCAAC AGAACA GAACAA TGGCAA
1561 GATTGT CATTAG CCAGTT GAACCC TTACAC CCTACG GATTGA GGGGAC ATGGGA CACTGC
1621 CTATGA TAAAAG GTCAGC TTCCAA TGCATT CATGAT TTGTGG GATTCT GTATGT GGTCAA
1681 ATCTGT ATATGA GGATGA TGACAA CGAGGC CACCGG TAATAA GATTGA CTACAT TTACAA
1741 CACTGA CCAAAG CAAGGA TAGCTT GGTGGA TGTACC CTTTCC CAACTC TTACCA GTACAT
1801 AGCAGC TGTGGA TTACAA TCCCAG GGACAA TCTGCT CTATGT GTGGAA TAACTA CCACGT
1861 TGTGAA ATACTC TTTGGA CTTCGG GCCTCT GGATAG TAGATC AGGGCC GGTACA TCATGG
1921 ACAAGT CTCCTA CATCTC TCCACC AATTCA CCTCGA CTCTGA ACTAGA AAGGCC CCCTGT
1981 CAGAGG TGAGTT TTCTTG ACTTGA GGCAAA AGAAGC AGTGTT CAGTGC TGACTA AGGGGA
2041 ATGAAT GAAACT AGGTGA GGTTGT AATATG CATTCG CAGTGC AGTACC TTTTCA AAAATG
2101 AAAATT AGCATG TGAAAA AAATCT TACTTA TAAACA GAAGCA TGAAAT ACTGTT CCAAGA
2161 AATAGA TGACTC CATTTA TTCAAA ATTTCT TAATCA TCTGAA GCATGG AGTTTT AAAACA
2221 TTTCAA TTCAAC AAATGT TAACTA CTGCTT GTCCTA GAAGAT ACAAGG ATGAAT AACACA
2281 TGGACC CCACCC TTAATA ACTATG ACGTAT CTATGA TTGATA GATGTT GACAAC CAAAAG
2341 ACGGGA ACTATT AATTCT GTTGGG AGCATG GGGCGA AGAATA ATTCAA AAATTC ATAAAG
2401 AAGTAA CATCTG AATTAG GTCCTG GAGGAT AAACAG GTAGTT ACTAGA ATGAAA AGAATG
2461 GAAAGG TACTTA AGAGAC CAAGGA CCAGAA TAAACT AAAACA ACAGGG AGCAAA
GCACAG
2521 ATTGTA TTTGGG GAACAC CCAGCT ATAGAA CAAGAT TGAGAA GGAGGC AGAAAA ATAGCC

2581 CAGCTT CACATA GTAAGG TCAGAT TACATT AAATTT CAAATG GCTTTG CAATAT AAGGAA
2641 TCATAA AACCCC CCCAAA AGAAAT AAAGTA ATTCTC AATTTG AGATAA AAAGCA ATTATT
2701 TTTATG CTGTAT AAAATT TCATCA GTTAAG AACTGT ATCTCT CACCCA CTAGGA AAAATA
2761 AAAGGA AGTTAA TAGAAC AAAGAT TTCACC TAACCA TCAAAT GGACTA GAAAGT CTTTAG
2821 CAATTA CTGTAT TTTGAT CATGAG AAAAGA CGTAAT TGCTGC CTATTT CATTTT AAATAT
2881 GATCAA TTTTTC CACTCA TATAAA CATATC AGAATA TATAAC CTATAT ATAATC TTTCTG
2941 TTTAGG AACAAA ATCTAA GTCCA

References

Liu D, Conn V, Goodall GJ, Conn SJ (2018) A highly efficient strategy for overexpressing circRNAs. Methods Mol Biol 1724:97-105.