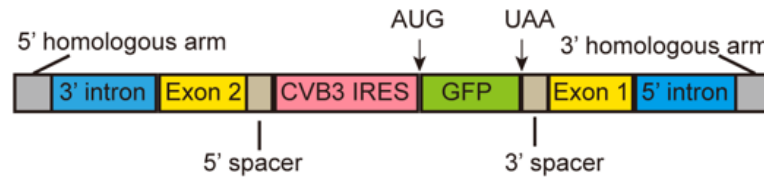


Supplement information

Table S1. The sequences of plasmids used in this study

(1) circRNA-CVB3_IRES-GFP



TAATACGACTCACTATAGGGGGAGACCCTCGACCGTCGATTGTCCACTGGTCAACA
ATAGATGACTTACAACATAATCGGAAGGTGCAGAGACTCGACGGGAGCTACCCTAA
CGTCAAGACGAGGGTAAAGAGAGAGTCCAATTCTCAAAGCCAATAGGCAGTAGC
GAAAGCTGCAAGAGAATGA^{AAATCCGTTGACCTTAAACGGTTCGTGTGGGTTCAAG}
^{TCCCTCCACCCCCAC}GCCGGAACGCAATAGCCGAAAAACAAAAAACAAAAAA
ACAAAAAACCACAAAAACAAAACACAT^{TAAAAACAGCCTGTGGGTTGATCC}
^{CACCCACAGGCCATTGGGCGCTAGCACTCTGGTATCACGGTACCTTTGTGCGCCT}
^{GTTTTATACCCCTCCCCAACTGTAAGTAAAGTAACACACACCGATCAACAGT}
^{CAGCGTGGCACACCAGCCACGTTTTGATCAAGCACTTCTGTTACCCCGGACTGAG}
^{TATCAATAGACTGCTCACGCGGTTGAAGGAGAAAGCGTTCGTTATCCGGCCAACTA}
^{CTTCGAAAAACCTAGTAACACCGTGGAAGTTGCAGAGTGTTTCGCTCAGCACTAC}
^{CCCAGTGTAGATCAGGTCGATGAGTCACCGCATTCCCCACGGGCGACCGTGGCGG}
^{TGGCTGCGTTGGCGGCCTGCCCATGGGGAAACCCATGGGACGCTCTAATACAGAC}
^{ATGGTGCAAGAGTCTATTGAGCTAGTTGGTAGTCCTCCGGCCCCCTGAATGCGGCT}
^{AATCCTAACTGCGGAGCACACACCCTCAAGCCAGAGGGCAGTGTGTGTAACGGG}
^{CAACTCTGCAGCGGAACCGACTACTTTGGGTGTCCGTGTTTCATTTTATTCCTATAC}
^{TGGCTGCTTATGGTGACAATTGAGAGATCGTTACCATATAGCTATTGGATTGGCCAT}
^{CCGGTGACTAATAGAGCTATTATATATCCCTTTGTTGGGTTTATACCACTTAGCTTGA}
^{AAGAGGTTAAACATTACAATTCATTGTTAAGTTGAATACAGCAAATCTAGAAATGG}
^{GCTTGGTGAGCAAGGGCGAGGAGCTGTTACCGGGGTGGTGCCCATCCTGGTTCGA}
^{GCTGGACGGCGACGTAAACGGCCACAAGTTCAGCGTGTCCGGCGAGGGCGAGGG}
^{CGATGCCACCTACGGCAAGCTGACCCTGAAGTTCATCTGCACCACCGGCAAGCTG}

CCCGTGCCCTGGCCCACCCTCGTGACCACCCTGACCTACGGCGTGCAGTGCTTCA
GCCGCTACCCCGACCACATGAAGCAGCAGACTTCTTCAAGTCCGCCATGCCCGA
AGGCTACGTCCAGGAGCGCACCATCTTCTTCAAGGACGACGGCAACTACAAGACC
CGCGCCGAGGTGAAGTTCGAGGGCGACACCCTGGTGAACCGCATCGAGCTGAAG
GGCATCGACTTCAAGGAGGACGGCAACATCCTGGGGCACAAGCTGGAGTACAAC
ACAACAGCCACAACGTCTATATCATGGCCGACAAGCAGAAGAACGGCATCAAGGT
GAACTTCAAGATCCGCCACAACATCGAGGACGGCAGCGTGCAGCTCGCCGACCAC
TACCAGCAGAACACCCCCATCGGCGACGGCCCCGTGCTGCTGCCCGACAACCACT
ACCTGAGCACCCAGTCCGCCCTGAGCAAAGACCCCAACGAGAAGCGCGATCACA
TGGTCCTGCTGGAGTTCGTGACCGCCGCCGGGATCACTCTCGGCATGGACGAGCT
GTACAAGTAAGGATCCAAAAACAAAAACAAAACGGCTATTATGCGTTACCGGC
GAGACGCTACGGACTTAAATAATTGAGCCTTAAAGAAGAAATTCTTTAAGTGGATG
CTCTCAAACCTCAGGGAAACCTAAATCTAGTTATAGACAAGGCAATCCTGAGCCAA
GCCGAAGTAGTAATTAGTAAGACCAGTGGACAATCGACGGATAACAGCATATCTAG
TTT

(2) HRV-B3 IRES (including an eIF4G-binding aptamer)

TTAAACAGCGGATGGGTACCCACCATCCGACCCACTGGGTGTAGTACTCTGGTA
CTTCGTACCTTTGTACGCCTGTTCTTCCCATTGTACCCTTCCTGAACTTCCAACCA
AGTAACGTTAGAAGCTCAACATTTAGTACAACAGGAAGCACCACATCCAGTGGTG
TTTAGTACAAGCACTTCTGTTTCCCCGGAGCGAGGTATAGGCTGTACCCACTGCCA
AAAACCTTTAACCGTTATCCGCCAACCAACTACGTAAAAGCTAGTAGTATTATGTTT
TTAACTAGGCGTTTCGATCAGGTGGATTTCCTCCACTAGTTTGGTCGATGAGGCT
AGGAATTCCCCACGGGTGACCGTGTCTAGCCTGCGTGGCGGCCAACCCAGCCCA
CTCACTATTTGTTTTCGCGCCCAGTTGCAAAAAGTGTGCGGGGCTGGGACGCCTTTT
TATAGACATGGTGTGAAGACTCGCATGTGCTTGGTTGTGATTCCTCCGGCCCCTGA
ATGCGGCTAACCTTAACCCTGGAGCCTTGTGTCACAAACCAGTGATGATAAGGTGCG
TAATGAGCAATTCCGGGACGGGACCGACTACTTTGGGTGTCCGTGTTTCTTATTTTT
CTTATTATTGTCTTATGGTCACAGCATATATATAACATATACTGTGATC

(3) 5' UTR PABPv2

CACAAAAAAAAACAAAAAAAAAAAAACAAAAAAAAAAAACTAATTGACTAA

(4) HBA1 full 3' UTR

GCTGGAGCCTCGGTGGCCATGCTTCTTGCCCCTTGGGCCTCCCCCAGCCCCCTCCT
CCCCTTCCTGCACCCGTACCCCGTGGTCTTTGAATAAAGTCTGA

(5) 5' P3 Twister U2A ribozyme

GGCCGCACTCGCCGGTCCCAAGCCCGGATAAAATGGGAGGGGGCGGGAAACCGC
CT

(6) 3' P1 Twister ribozyme

AACACTGCCAATGCCGGTCCCAAGCCCGGATAAAAGTGGAGGGTACAGTCCACGC

(7) 5' complement sequence

AACCATGCCGAGTGCGGCCGCATATATGG

(8) 3' complement sequence

CCATGTCTATGTGGCCGCGGTTCGGCGTGGACTGTAG

(9) Luci

ATGGAAGACGCCAAAAACATAAAGAAAGGCCCGCGCCATTCTATCCGCTGGAAG
ATGGAACCGCTGGAGAGCAACTGCATAAGGCTATGAAGAGATACGCCCTGGTTCC
TGGAACAATTGCTTTTACAGATGCACATATCGAGGTGGACATCACTTACGCTGAGT
ACTTCGAAATGTCCGTTTCGGTTGGCAGAAGCTATGAAACGATATGGGCTGAATACA
AATCACAGAATCGTCGTATGCAGTGAAAACCTCTCTTCAATTCTTTATGCCGGTGTTG
GGCGCGTTATTTATCGGAGTTGCAGTTGCGCCCGCGAACGACATTTATAATGAACG
TGAATTGCTCAACAGTATGGGCATTTTCGCAGCCTACCGTGGTGTTCGTTTCCAAAA
AGGGGTTGCAAAAAATTTTGAACGTGCAAAAAAAGCTCCCAATCATCCAAAAAAT
TATTATCATGGATTCTAAACGGATTACCAGGGATTTTCAGTCGATGTACACGTTCGT

CACATCTCATCTACCTCCCGGTTTTAATGAATACGATTTTGTGCCAGAGTCCTTCGA
TAGGGACAAGACAATTGCACTGATCATGAACTCCTCTGGATCTACTGGTCTGCCTA
AAGGTGTCGCTCTGCCTCATAGAACTGCCTGCGTGAGATTCTCGCATGCCAGAGAT
CCTATTTTTGGCAATCAAATCATTCCGGATACTGCGATTTTAAGTGTTGTTCCATTCC
ATCACGGTTTTTGAATGTTTACTACACTCGGATATTTGATATGTGGATTTTCGAGTCG
TCTTAATGTATAGATTTGAAGAAGAGCTGTTTCTGAGGAGCCTTCAGGATTACAAG
ATTCAAAGTGCGCTGCTGGTGCCAACCCTATTCTCCTTCTTCGCCAAAAGCACTCT
GATTGACAAATACGATTTATCTAATTTACACGAAATTGCTTCTGGTGCGCTCCCT
CTCTAAGGAAGTCGGGGAAGCGGTTGCCAAGAGGTTCCATCTGCCAGGTATCAGG
CAAGGATATGGGCTCACTGAGACTACATCAGCTATTCTGATTACACCCGAGGGGGA
TGATAAACCGGGCGCGGTCGGTAAAGTTGTTCCATTTTTTGAAGCGAAGGTTGTGG
ATCTGGATACCGGGAAAACGCTGGGCGTTAATCAAAGAGGCGAACTGTGTGTGAG
AGGTCCTATGATTATGTCCGGTTATGTAAACAATCCGGAAGCGACCAACGCCTTGA
TTGACAAGGATGGATGGCTACATTCTGGAGACATAGCTTACTGGGACGAAGACGA
ACACTTCTTCATCGTTGACCGCCTGAAGTCTCTGATTAAGTACAAAGGCTATCAGG
TGGCTCCCGCTGAATTGGAATCCATCTTGCTCCAACACCCCAACATCTTCGACGCA
GGTGTCGCAGGTCTTCCCGACGATGACGCCGGTGAACTTCCCGCCGCCGTTGTTG
TTTTGGAGCACGGAAAGACGATGACGGAAAAAGAGATCGTGGATTACGTCGCCAG
TCAAGTAACAACCGCGAAAAAGTTGCGCGGAGGAGTTGTGTTTGTGGACGAAGT
ACCGAAAGGTCTTACCGGAAAACCTCGACGCAAGAAAAATCAGAGAGATCCTCATA
AAGGCCAAGAAGGGCGGAAAGATCGCCGTGTAA

(10) FLAG-HA-tag

ACCATGGACTACAAGGACGACGATGACAAGCTCGATGGAGGATACCCCTACGACG
TGCCGACTACGCCAGCGGATCCAGCTAA

(11) mCherry

ATGGTGAGCAAGGGCGAGGAGGATAACATGGCCATCATCAAGGAGTTCATGCGCT
TCAAGGTGCACATGGAGGGCTCCGTGAACGGCCACGAGTTCGAGATCGAGGGCG
AGGGCGAGGGCCGCCCTACGAGGGCACCCAGACCGCCAAGCTGAAGGTGACCA

AGGGTGGCCCCCTGCCCTTCGCCTGGGACATCCTGTCCCCTCAGTTCATGTACGGC
TCCAAGGCCTACGTGAAGCACCCCGCCGACATCCCCGACTACTTGAAGCTGTCCTT
CCCCGAGGGCTTCAAGTGGGAGCGCGTGATGAACTTCGAGGACGGCGGGCGTGGT
GACCGTGACCCAGGACTCCTCCCTGCAGGACGGCGAGTTCATCTACAAGGTGAAG
CTGCGCGGCACCAACTTCCCCTCCGACGGCCCCGTAATGCAGAAGAAGACCATGG
GCTGGGAGGCCTCCTCCGAGCGGATGTACCCCGAGGACGGCGCCCTGAAGGGCG
AGATCAAGCAGAGGCTGAAGCTGAAGGACGGCGGCCACTACGACGCTGAGGTCA
AGACCACCTACAAGGCCAAGAAGCCCGTGCAGCTGCCCGGCGCCTACAACGTCA
ACATCAAGTTGGACATCACCTCCCACAACGAGGACTACACCATCGTGGAACAGTA
CGAACGCGCCGAGGGCCGCCACTCCACCGGCGGCATGGACGAGCTGTACAAG

(12) NA1

ATGAACCCCAACCAGAAGATCATCACCATTGGCTCTGTCTGCATGACCATTGGCAT
GGCCAACCTGATCCTGCAGATTGGCAACATCATCTCCATCTGGATCTCCCCTCCAT
CCAGCTGGGCAACCAGAACCAGATTGAGACCTGCAACCAGTCTGTGATCACCTAT
GAGAACAACACCTGGGTGAACCAGACCTATGTGAACATCTCCAACACCAACTTTG
CTGCTGGCCAGTCTGTGGTCTCTGTGAAGCTGGCTGGCAACTCCTCCCTGTGCCCT
GTCTCTGGCTGGGCCATCTACTCCAAGGACAACTCTGTGAGGATTGGCTCCAAGG
GCGATGTCTTTGTGATCAGGGAGCCATTCATCTCCTGCTCCCCCTGGAGTGCAGG
ACCTTCTCCTGACCCAGGGCGCCCTGCTGAATGACAAGCACTCCAATGGCACCAT
CAAGGACAGGTCCCCATACAGGACCCTGATGTCCTGCCCCATTGGCGAGGTGCCA
TCCCCATACAACCTCCAGGTTTGAGTCTGTGGCCTGGTCTGCCTCTGCCTGCCATGA
TGGCATCAACTGGCTGACCATTGGCATCTCCGGCCCTGACAATGGCGCTGTGGCTG
TGCTGAAGTACAATGGCATCATCACAGACACCATCAAGTCCTGGAGGAACAACAT
CCTGAGGACCCAGGAGTCTGAGTGTGCCTGTGTGAATGGCTCCTGCTTCACAGTG
ATGACAGATGGCCCATCCAATGGCCAGGCCTCCTACAAGATCTTCAGGATTGAGAA
GGGCAAGATTGTGAAGTCTGTGGAGATGAATGCCCCCAACTACCACTATGAGGAG
TGCTCCTGCTACCCTGACTCCTCTGAGATCACCTGTGTCTGCAGGGACAACCTGGCA
TGGCTCCAACAGGCCATGGGTCTCCTTCAACCAGAACCTGGAGTACCAGATTGGC
TACATCTGCTCTGGCATCTTTGGCGACAACCCAGGCCCAATGACAAGACAGGCT

CCTGTGGCCCTGTCTCCTCCAATGGCGCCAATGGCGTGAAGGGCTTCTCCTTCAAG
TATGGCAATGGCGTCTGGATTGGCAGGACCAAGTCCATCTCCTCCAGGAATGGCTT
TGAGATGATCTGGGACCCCAATGGCTGGACAGGCACAGACAACAACCTTCTCCATC
AAGCAGGACATTGTGGGCATCAATGAGTGGTCTGGCTACTCTGGCTCCTTTGTGCA
GCATCCTGAGCTGACAGGCCTGGACTGCATCAGGCCCTGCTTCTGGGTGGAGCTG
ATCAGGGGCAGGCCCAAGGAGAACACCATCTGGACCTCTGGCTCCTCCATCTCCT
TCTGTGGCGTGAACCTCTGACACAGTGGGCTGGTCCTGGCCTGATGGCGCTGAGCT
GCCATTCACCATTGACAAGTAA

(13) C/D box

GGGCGTGATGCGAAAGCTGACCCT

(14) LIPG

ATGAGCAACTCCGTTCCCTCTGCTCTGTTTCTGGAGCCTCTGCTATTGCTTTG
CTGCGGGGAGCCCCGTACCTTTTGGTCCAGAGGGACGGCTGGAAGATAAG
CTCCACAAACCCAAAGCTACACAGACTGAGGTCAAACCATCTGTGAGGTT
TAACCTCCGCACCTCCAAGGACCCAGAGCATGAAGGATGCTACCTCTCCGT
CGGCCACAGCCAGCCCTTAGAAGACTGCAGTTTCAACATGACAGCTAAAA
CCTTTTTCATCATTACGGATGGACGATGAGCGGTATCTTTGAAAACCTGGCT
GCACAAACTCGTGTCAGCCCTGCACACAAGAGAGAAAGACGCCAATGTAG
TTGTGGTTGACTGGCTCCCCCTGGCCCACCAGCTTTACACGGATGCGGTCA
ATAATACCAGGGTGGTGGGACACAGCATTGCCAGGATGCTCGACTGGCTGC
AGGAGAAGGACGATTTTTCTCTCGGGAATGTCCACTTGATCGGCTACAGCC
TCGGAGCGCACGTGGCCGGGTATGCAGGCAACTTCGTGAAAGGAACGGTG
GGCCGAATCACAGGTTTGGATCCTGCCGGGGCCCATGTTTGAAGGGGCCGA
CATCCACAAGAGGCTCTCTCCGGACGATGCAGATTTTGTGGATGTCCTCCA
CACCTACACGCGTTCCTTCGGCTTGAGCATTGGTATTCAGATGCCTGTGGGC
CACATTGACATCTACCCCAATGGGGGTGACTTCCAGCCAGGCTGTGGACTC
AACGATGTCTTGGGATCAATTGCATATGGAACAATCACAGAGGTGGTAAAA
TGTGAGCATGAGCGAGCCGTCCACCTCTTTGTTGACTCTCTGGTGAATCAG

GACAAGCCGAGTTTTGCCTTCCAGTGCACTGACTCCAATCGCTTCAAAAAG
GGGATCTGTCTGAGCTGCCGCAAGAACCGTTGTAATAGCATTGGCTACAAT
GCCAAGAAAATGAGGAACAAGAGGAACAGCAAAATGTACCTAAAAACCC
GGGCAGGCATGCCTTTCAGAGTTTACCATTATCAGATGAAAATCCATGTCTT
CAGTTACAAGAACATGGGAGAAATTGAGCCCACCTTTTACGTCACCCTTTA
TGGCACTAATGCAGATTCCCAGACTCTGCCACTGGAAATAGTGGAGCGGAT
CGAGCAGAATGCCACCAACACCTTCCTGGTCTACACCGAGGAGGACTTGG
GAGACCTCTTGAAGATCCAGCTCACCTGGGAGGGGGCCTCTCAGTCTTGG
TACAACCTGTGGAAGGAGTTTCGCAGCTACCTGTCTCAACCCCGCAACCCC
GGACGGGAGCTGAATATCAGGCGCATCCGGGTGAAGTCTGGGGAAACCCA
GCGGAAACTGACATTTTGTACAGAAGACCCTGAGAACACCAGCATATCCCC
AGGCCGGGAGCTCTGGTTTCGCAAGTGTCGGGATGGCTGGAGGATGAAAA
ACGAAACCAGTCCCCTGTGGAGCTTCCCTAA

Table S2. Primers used for RT-qPCR.

Targets	Primer orientation	Sequences
Human-GAPDH	Forward	GTCAACGGATTTGGTCGTATTG
	Reverse	AAACCATGTAGTTGAGGTCAAT
GFP	Forward	CGTGACCACCCTGACCT
	Reverse	CACCTTGATGCCGTTCTT
Luciferase	Forward	GAGATACGCCCTGGTTC
	Reverse	CGGGAGGTAGATGAGATG
NA1	Forward	TTGAGAAGGGCAAGATTGT
	Reverse	GGGTTGTCGCCAAAGAT
LIPG	Forward	CCCACCAGCTTTACACGGAT
	Reverse	GGCAGGATCCAAACCTGTGA
HRV-B3 IRES	Forward	TGTGAAGACTCGCATGTGCT
	Reverse	CACCCAAAGTAGTCGGTCCC
CVB3 IRES	Forward	GCGCCTGTTTTATACCCCCT
	Reverse	ACTCAGTCCGGGGTAACAGA
upstream of IRES / mCherry	Forward	AGGACGACGATGACAAGCTC
	Reverse	CGAGTGCGGCCTATAGTGAG
Junction of plasmid including NA1-C/D_box	Forward	GCTGCCATTACCATGACA
	Reverse	ATGGGAAGAACAGGCGTACAA
Junction of plasmid including HRV-B3_IRES-GFP	Forward	CCCCGTGGTCTTTGA
	Reverse	GTTGGTTGGCGGATAA
Junction of plasmid including mCherry-GFP	Forward	GAGCAAAGACCCCAACGAGA
	Reverse	TGTTATCCTCCTCGCCCTTG