

Appendix Figures/Tables

The Appendix figure/table legends:

Appendix Table S1 Detailed information of seven candidate circRNAs (including loci, strand, genomic and spliced length). *Page 2.*

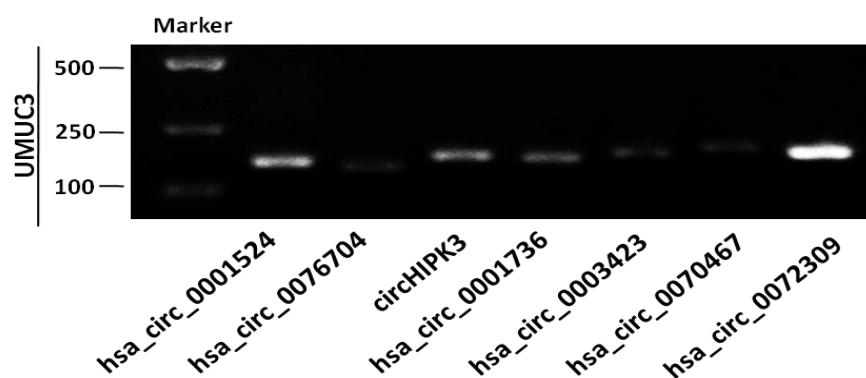
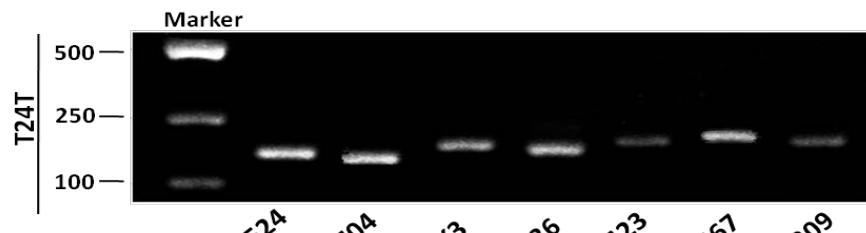
Appendix Figure S1 Candidate circRNAs were amplified by divergent primers and tested by RT-PCR in T24T and UMUC3 cells. *Page 2.*

Appendix Figure S2 Six binding sites mutation of circHIPK3. *Page 3.*

Appendix Table S2 Primers and RNA sequences used in this study. *Page 4-7.*

Appendix Table S1

Name	Circ_loci	Strand	Genomic length	Spliced length
hsa_circ_0001524	Chr5:131677703-131709272	(+)	31570	813
hsa_circ_0076704	Chr:6:47503280-47554766	(-)	51487	537
circHIPK3 (hsa_circ_0000284)	Chr:11:33286413-33287511	(-)	1099	1099
hsa_circ_0001736	Chr7:105073619-105077433	(+)	3815	633
hsa_circ_0003423	Chr18:58934433-58953799	(+)	19367	804
hsa_circ_0070467	Chr4:9457335- 94586444	(-)	13094	672
hsa_circ_0072309	Chr5:38523419-38530666	(+)	7248	580

Appendix Figure S1

Appendix Figure S2

Site1 wt 5' AGGTCATAGCAGCTCAG 3'

miR-558 3' UAAAAA**CCA UGUCGUCGAGU** 5'

Site1 mut 5' AGGTCA~~T~~AGCCAACAGG 3'

Site2 wt 5' AGGCACAGCAAGCTCAC 3'

miR-558 3' UAAAAA**CCAUGUCG UCGAGU** 5'

Site2 mut 5' AGGCACAGCACAACAGC 3'

Site3 wt 5' G TTGGT GGATCCTGTT**CGGCAGC CTTAC** 3'

Site3 mut 5' G TTGGT GGATCCTGTTG**AACAC** CTTAC 3'

Site4 wt 5' G TTGGATAATC ATAGCAGCG CAA 3'

miR-558 3' UAA**AACCA** **UGUCGUCG** **GU** 5'

Site4 mut 5' G~~TTGG~~ATAATC AT~~AG~~ACAAG AGA 3'

Site5 wt 5' AGTACAGCA TGAAGTCTTAT GCTCC 3'

miR-558 3' UAAAAC**CAUGUCGU** 5' **CGAGU** 5'

Site5 mut 5' A~~GTACAGCA~~TGAAGTCTTAT~~AAGAC~~ 3'

Site6 wt 5' TG TTTGAAAAACAC TGCAGGTGCTA CAA 3'

Site6 mut 5' TG TTTTG AAAAAACAC TG CAG GT AAGA AGA 3'

Appendix Table S2

Primers for PCR	
hsa_circ_0001524 Forward	ATCATCTGCCTGGGTTCC
hsa_circ_0001524 Reverse	TCCATTGGGTTGCTGTGAA
hsa_circ_0076704 Forward	CATGAAGCCCAGGACGATT
hsa_circ_0076704 Reverse	AGTTCTCCTTCCAGGCCACC
hsa_circ_0001736 Forward	GCAAATGGGTATTCTTTA
hsa_circ_0001736 Reverse	AGTAATTGATGTTGGAGTAT
hsa_circ_0003423 Forward	GGGTGGACGTGTTGGGAGT
hsa_circ_0003423 Reverse	TCAGGGCAGGTGTAGGGAG
hsa_circ_0070467 Forward	CACTGGGACTGAACATTGA
hsa_circ_0070467 Reverse	CACTGGGACTGAACATTGA
hsa_circ_0072309 Forward	TGTCTGCTGATTCTAACCTC
hsa_circ_0072309 Reverse	CGTAAATATCCATCATCTGTGC
circHIPK3 Forward	TTCAACATATCTACAATCTCGGT
circHIPK3 Reverse	ACCATTCACATAGGTCCGT
linear-HIPK3 Forward	TCACAAGTCTGGTCTACCCA
linear-HIPK3 Reverse	CACATAGGTCCGTGGATAGTTTC
GAPDH Forward	CAATGACCCCTTCATTGACC
GAPDH Reverse	TTGATTTGGAGGGATCTCG
divergent-GAPDH Forward	GAAGGTGAAGGTCGAGTC
divergent-GAPDH Reverse	GAAGATGGTGATGGGATTTC
HPSE Forward	GAATGGACGGACTGCTAC
HPSE Reverse	CCAAAGAATACTTGCCTCA
VEGF Forward	ATGACGAGGGCCTGGAGTGT
VEGF Reverse	CATTACACGTCTGCGGATCT

MMP9 Forward	GCAGAGGAATACTGTACCGC
MMP9 Reverse	AGGTTTCCAATCTGCCAGGT
hsa-miR-1283 Forward	Ribobio
hsa-miR-1283 Reverse	Ribobio
hsa-miR-551b-5p Forward	Ribobio
hsa-miR-551b-5p Reverse	Ribobio
hsa-miR-1178-3p Forward	Ribobio
hsa-miR-1178-3p Reverse	Ribobio
hsa-miR-193b-3p Forward	Ribobio
hsa-miR-193b-3p Reverse	Ribobio
hsa-miR-653-5p Forward	Ribobio
hsa-miR-653-5p Reverse	Ribobio
hsa-miR-193a-3p Forward	Ribobio
hsa-miR-193a-3p Reverse	Ribobio
hsa-miR-148b-3p Forward	Ribobio
hsa-miR-148b-3p Reverse	Ribobio
hsa-miR-558 Forward	Ribobio
hsa-miR-558 Reverse	Ribobio
hsa-miR-1179 Forward	Ribobio
hsa-miR-1179 Reverse	Ribobio
hsa-miR-495-3p Forward	Ribobio
hsa-miR-495-3p Reverse	Ribobio
hsa-miR-197-5p Forward	Ribobio
hsa-miR-197-5p Reverse	Ribobio
hsa-miR-33a-5p Forward	Ribobio
hsa-miR-33a-5p Reverse	Ribobio
U6 Forward	Ribobio

U6 Reverse	Ribobio
siRNAs	
si NC sense	UUCUCCGAACGUGUCACGUTT
si NC antisense	ACGUGACACGUUCGGAGAATT
si circHIPK3-1 sense	GGUACUACAGGUUAUGGCCUTT
si circHIPK3-1 antisense	AGGCCAUACCUGUAGUACCGA
si circHIPK3-2 sense	UACUACAGGUUAUGGCCUCATT
si circHIPK3-2 antisense	UGAGGCCAUACCUGUAGUACC
si circHIPK3-3 sense	UCGGUACUACAGGUUAUGGCTT
si circHIPK3-3 antisense	GCCAUACCUGUAGUACCGAGA
FISH probes	
circHIPK3	Ribobio
U6	Ribobio
18S	Ribobio
miR-558	Ribobio
Biotinylated probes	
circHIPK3	CCATACCTGTAGTACCGAGA
(biotin)miR-558 mimics sense	UGAGCUGCUGUACCAAAAU
(biotin)miR-558 mimics antisense	UUUGGUACAGCAGCUAUU
biotin-miR-558 mutant sense	UACAUUAUCUGUACCAAAAU
biotin-miR-558 mutant antisense	UUUGGUACAGAUUAUGUAUU
Northern blot probes	
circHIPK3 Forward	GTATGGCCTCACAAAGTCTTG
circHIPK3-T7-Reverse	TAATACGACTCACTATAAGGGCTGTAGTACCGAGAT TGTAGAT
HIPK3 Forward	TCACAAGTCTTGGTCTACCCA
HIPK3-T7-Reverse	TAATACGACTCACTATAAGGCACATAGGTCCGTGG ATAGTTTC
miR-558 mimics and inhibitors	
mimics NC sense	UUCUCCGAACGUGUCACGUTT

mimics NC antisense	ACGUGACACGUUCGGAGAATT
miR-558 mimics sense	UGAGCUGCUGUACCAAAAU
miR-558 mimics antisense	UUUGGUACAGCAGCUAUU
anti NC	CAGUACUUUUGUGUAGUACAA
anti miR-558	AUUUUGGUACAGCAGCUA