

**Additional File 11. Primer list**

<b>Name</b>	<b>Experiment, 5'-&gt;3' sequence</b>	<b>Tm</b>
<i>Fragments for Infusion Cloning of C50</i>		
<i>pNOS::DsRed::tNOS</i>		
F-pTKan-Apale-pNOS	ggggatcctctagagGATACATGAGAATTAAGGGAG	
R-tNOS-pTKan-Apal	tccgcgacgtcccgggccGAGCTTGCATGCCGGTTCG	
<i>Fragments for Infusion Cloning of C381</i>		
<i>PcoCAS9</i>		59
pTKanAvrIIACCPcoCAS9_F	gaacacgggggactcctaggCACCatggattacaaggatg	
tG7AsclCAS9	gctcatcctagttagtcagtGGCGCGCctacttcttcttagcctgtcc	
<i>tG7-AmpR</i>		53
CAS9AscltG7_F	GCGCGCCactgactaactaggatgagc	
pTKanavrIIIdAmp_R	ataacaggctagccctagtaccaatgcttaacagtgag	
<i>Fragments for Infusion Cloning of C382</i>		
<i>pUBQ10</i>		57
XholpUBQ10_F	ggagatctacgcgtgtcactcgaggagtaccgacgagtcag	
UBQ10AvrII_R	catccttgaatccatggtcctaggagtgttaacagaaaaactcag	
<i>Fragments for Infusion Cloning of pENTR Vectors with Various sgRNA</i>		
<i>Piece1 for entry vector with various spacer sequence</i>		
Piece1F (pairing with gRNAspecific_R)	ccagtcttaagctcgggcc	58
<i>Piece2 for entry vector with various spacer sequence</i>		
Piece2R (pairing with gRNAspecific_F)	tacgactcactataggggatatc	50
<i>Piece3 for entry vector with various spacer sequence</i>		
Piece3F	gatatcccctatagtgagtcg	57
Piece3R	ggcccgagcttaagactg	63
<i>HCT_gRNA2 specific primers for entry vector</i>		
HCT_gRNA2F	GTCTACTTCTACAGACCCACgttttagagctagaaatagc	
HCT_gRNA2R	GTGGGTCTGTAGAAGTAGACaatcgctatgtcgactctatc	
<i>HCT_gRNA3 specific primers for entry vector</i>		
HCT_gRNA3F	GGTATGTGCACCGCGGACAAgttttagagctagaaatagc	
HCT_gRNA3R	TTGTCCGCGGTGCACATACCaatcgctatgtcgactctatc	
<i>HCT_gRNA4 specific primers for entry vector</i>		
HCT_gRNA4F	GCTGTGGCGGGTCCCTAGCTgttttagagctagaaatagc	
HCT_gRNA4R	AGCTAGGGACCCGCCACAGCaatcgctatgtcgactctatc	
<i>HCT_gRNA5 specific primers for entry vector</i>		
HCT_gRNA5F	GACAGTGTCCCATCCTCCTgttttagagctagaaatagc	
HCT_gRNA5R	AGGAGGATGGGAACACTGTCaatcgctatgtcgactctatc	
<i>HCT_gRNA6 specific primers for entry vector</i>		
HCT_gRNA6F	GAGGTCAGCTCTTGACTACCgttttagagctagaaatagc	
HCT_gRNA6R	GGTAGTCAAGAGCTGACCTCaatcgctatgtcgactctatc	
<i>HCT_gRNA7 specific primers for entry vector</i>		
HCT_gRNA7F	GATAAGCTGCCATCATTAGTgttttagagctagaaatagc	
HCT_gRNA7R	ACTAATGATGGCAGCTTATCaatcgctatgtcgactctatc	
<i>HCT_gRNA8 specific primers for entry vector</i>		
HCT_gRNA8F	GATATTCAGTCAACACCATgttttagagctagaaatagc	
HCT_gRNA8R	ATGGTGTTCAGTGAATATCaatcgctatgtcgactctatc	
<i>HCT_gRNA9 specific primers for entry vector</i>		
HCT_gRNA9F	GATCAGTGGGAAAGGCGCGAgtttagagctagaaatagc	

HCT_gRNA9R	TCGCGCCTTTCCCACTGATCaatcgctatgtcgactctatc	
<i>HCT_gRNA10 specific primers for entry vector</i>		
HCT_gRNA10F	GATCTGTCAGCCCTTGTCCGgttttagagctagaaatagc	
HCT_gRNA10R	CGGACAAGGGCTGACAGATCaatcgctatgtcgactctatc	
<i>HCT_gRNA11 specific primers for entry vector</i>		
HCT_gRNA11F	GATGAAAAGCAGGCTGTGGCgttttagagctagaaatagc	
HCT_gRNA11R	GCCACAGCCTGCTTTTCATCaatcgctatgtcgactctatc	
<i>HCT_gRNA12 specific primers for entry vector</i>		
HCT_gRNA12F	GCTCATACGAGATGTTGGCAgttttagagctagaaatagc	
HCT_gRNA12R	TGCCAACATCTCGTATGAGCaatcgctatgtcgactctatc	
<i>HCT_gRNA13 specific primers for entry vector</i>		
HCT_gRNA13F	GTATGGATGATAACTATCTGgttttagagctagaaatagc	
HCT_gRNA13R	CAGATAGTTATCATCCATACaatcgctatgtcgactctatc	
<i>HCT_gRNA14 specific primers for entry vector</i>		
HCT_gRNA14F	GTGTTCCAGATTGGAGGGCAAgttttagagctagaaatagc	
HCT_gRNA14R	TTGCCCTCCAATCTGAACACaatcgctatgtcgactctatc	
<i>GONST2_gRNA1 specific primers for entry vector</i>		
GONST2_gRNA1F	GAGATAACAGGCGTGACCACgttttagagctagaaatagc	
GONST2_gRNA1R	GTGGTCACGCCTGTTATCTCaatcgctatgtcgactctatc	
<i>GONST2_gRNA2 specific primers for entry vector</i>		
GONST2_gRNA2F	GTTTGGTGGGTTTCATTAACAgtttagagctagaaatagc	
GONST2_gRNA2R	TGTTAATGAACCCACCAAACaatcgctatgtcgactctatc	
<i>Sequences flanking HCT_gRNA12 in tobacco</i>		
HCTsite601F	gaatatcagcctgcaccaag	63
HCTsite900R	CACATTCCCAAAGTAACCAGG	
<i>Sequences flanking HCT_gRNA14 in tobacco</i>		
HCTsite1157F	ctttatgggacctggtggaattc	62
CSY4site11R	aagtaatggtcgctagcaacc	
<i>Sequences flanking HCT_gRNA14 in Arabidopsis</i>		
HCTsite1066F	ggtgcacatacctacaagtgc	62
HCT3'UTR230_R	catacagcatggtggatataacc	
<i>Sequences flanking Gonst2_gRNA1</i>		
GONST2-102F	tctttcaacttctcgatcag	60
GONST2-578R	AGATATCTAGTACAGCTACCAC	
<i>Sequences flanking Gonst2_gRNA2</i>		
GONST2-1684F	GGTAGTGGCAACAGCAAG	60
GONST2 R2	TGACATTTTAGCTCTGGCAAAG	