

a. Annealed DNA for replacing yFCU expression cassette in pL6cs plasmid

5' -AGGTGACACTATAGAATACTCAAGCTGCGGCCCTAGTCTAGGGcGCGCCatgtaggcgccaact
3' -TCCACTGTGATATCTTATGAGTTCGACGCCGGGATCAGATCCCgCGCGGtacatccgcggttga

b. Primers for adding HA tag to C-terminus of ck2 β 1 using CRISPR/Cas9

P3 tcatctcttatcaataatagctgg
P4 ACCTCCAGAACCCTTCCggtttcagaaattttagtagttcttc
P5 CTGAcTAcGCATAaacataaacctaaatatatttaaatttatatg
P6 aactgatcttaaaattagacatgatc
P7 acgGGAAGTGGTTCTGGAGGTTATCCTTAcGATGTTCCAGAcTATGCAATATATC
P8 atatatatttaggtttatgtttaTGCgTAgTCAGGcACATC
P9 CATATTTATTAAATCTAGAATTcttatcaataatagctggggatgcac
P10 GTTATTATTTTTACCGTtccatgGgacatgatcataagaaaaaggtgtc
P11 gtatttttaaaaagTTACgTaaAgaagaactacaaatttctgaaacg
P12 gttcttcTttAcGTAAcTTTTtaaaatactttggattttttttaag
P13 CATATTAAGTATATAATATTgtatttttaaaaagcttagaagtttagagctagaaatag
P14 ctatttctagctctaaaacttctaagcttttttaaaatacAATATTATATACTTAATATG

c. Primers for adding HA-TY1 tag to C-terminus of ck2 α using CRISPR/Cas9

P15 gcattggattattgtcatagccaag
P16 CCACTTCctgattcTtcTCTgacttctctaaagtaaggatgctcc
P17 CCCATTAGATtaataataataaaaaaaaaatgcacacatat
P18 caattgaaaattttggaaaaaattttatg
P19 gaagtcAGAgAgaAaatcaGGAAGTGGTTCTGGAGGTTATC
P20 gtgtgcatttttttttattattattaATCTAATGGGTCTTGATTAGTGTGTAC
P21 GGCCCTAGTCTAGGGcGCGCCattggattattgtcatagccaag
P22 ATTTTTTTTTACAAAATGCTTAAGgaaaaagaagacatggtttggtttg
P23 ATATTAAGTATATAATATTgttacttttagagaagtccgtggttttagagctagaaatag
P24 ctatttctagctctaaaaccacggacttctctaaagtaacAATATTATATACTTAATAT

d. Primers for adding HA-TY1 tag to C-terminus of stk using CRISPR/Cas9

P25 CCATTAGATtgatttaaaaaaacggaatttttttttttttaaaag
P26 TTTTTTACAAAATGCTTAAGgtaagctcttctatttcaaaatacaaatc
P27 GGCCCTAGTCTAGGGcGCGCCtttgttttggttgggacatatc
P28 CctcattgtcTtcTtcAaGgttaagaataaatatttctgctgc
P29 acCtTgaAgaAgacaatgagGGAAGTGGTTCTGGAGGTTATC
P30 ccgtttttttttaaatcaATCTAATGGGTCTTGATTAGTGTGTAC
P31 ATATTAAGTATATAATATTgtattattcttaacttagagggtttagagctagaaatag
P32 ctatttctagctctaaaaccctctaagttaagaataatacAATATTATATACTTAATAT

e. DNA cassettes to express sgRNAs of 3 genes

ck2 β 1 gtatttttaaaaagcttagaaagg (agg is the PAM)
ck2 α ttacttttagagaagtccgtgagg (agg is the PAM)
stk tattattcttaacttagaggagg (agg is the PAM)

f. Primers to check the tagging of 3 genes by PCR

P33 ttatatggattaaaaacggagatcc
P34 caaataaaataatgcaaaggaatcac
P1 cctaaatttacagataaggatattcg
P2 gttgagcacatttttctctataaggg
P35 ctttgatgaagatgggaatttgtatg
P36 cccaattctaatatgctcaaaag