

**Supplemental Data Table S1: PCR Primers**

Oligo	Forward (5'-3')	Reverse (5'-3')
LIC-HXGPRT-TgCDPK7-3HA	415TACTTCCAATCCA ATTTAATGCAACACT CCGGTCTCTTTCGAC GGCG	416 TCCTCCACTTCCAA TTTTAGCCTTATGT ACTTCCTCTATGCT AGGTGAGG
TgPH+KD(CDPK7)pGE X4T-1	101 GAC TAG GAT CCG CGG CCA TCG ACG GCG TTC	104 GTC AAG CGG CCG CCT AGA TCC AAA TGT GCT GGA GCG CA
5'UTR forTgCDPK7-iKD	90 GTA CGC CAT GGG AGA CAC ACG CAG ACT TAC TTC GTG	91 GTA CGG GAT CCC GAC CTT GGA GAC AGA GAA GAC
3'Coding sequence for TgCDPK7-iKD	123 TTCCTAGGGATATCA AAA TGG GGG GCG TCC AGT CGA CCC GCG	93 GTA GCA CTA GTG GAA GGG AGG ACG GAG ACT GGT CG
5'-integration for TgCDPK7-iKD	105 GTGGAAAATGCCAA GCAAATACTGCAG	106 CCTGAGACGCGTGT TCAAGCTTATC
3'-integration for TgCDPK7-iKD	107 CTGATAGGGAGTGG TAAACTCGAG	108 GCACTTGCGGCGGC G GAGACACTC
WT promoter TgCDPK7	137 GGTTTCTCCCGTCTG GCGAGGAAGGATTG TGC	138 CGCGGAGAAATCTG CGGACACGCACCCG
DDmycTgRab11a	Rab11afDDFH2 CCATGCATGCGGCTA AAGATGAATAC	Rab11arDDFH2 TCTTAATTAATCAG GCGGAACAGCAGC C
DDmycTgRab11a_S207A	Rab11afS207A AGCGAACAGATGCA C AAATACGGCAA	Rab11arS207A TTGCCGTATTTGTG CATCTGTTCGCT
DDmycTgRab11a_S207D	Rab11afS207D AGCGAACAGATG ACCAAATACGGCAA	Rab11arS207D TTGCCGTATTTGGT CATCTGTTCGCT

DDmycTgRab11a_T205A	Rab11afT205A GAT GAG GAG CGA GCT GAT AGC CAA ATA	Rab11arT205A TAT TTG GCT ATC AGC TCG CTC CTC ATC
DDmycTgRab11b	Rab11bfDDFH2 GCGATGCATGGGGG TTCTGAAGACTACG	Rab11brDDFH2 GCGTTAATTAACCA CAGCAGGACAGATT CTGAGGG
PET28a- TgRab11a	TgRab11aF CTGGATTCCGCGGCT AAAGATGAATACTA CG	TgRab11aR CTGCGGCCGCTCA GGC GGA ACA GCA GCC
pGEX4T1-TgGPAT	TgGPAT_FP CGGGATCCACGAAG AACGAAGAAGATCC G	TgGPAT_RP AAGCGGCCGCTCGA ACCGCTACTACTCG
Real Time PCR TgCDPK7(182-292bp)	210 GTCCCGGACCCGGA ATCGA	211 CACGCTTCCCGAGC CTTTG
Real Time PCR TgCDPK7(5615-5729bp)	AGTGAAGCCGCGAT CGAC	CGCCCTTTCGCCGG TAGTA
Real Time PCR TgCDPK3(43-153bp)	208 GGCGCAGCTGGAGA AAAACC	209 GTGTCCGGGAGACCC AGTTC
TgGPAT-myc oligos(endogenous tagging)	GPAT-Myc F GCCAGAGCTGCGCG CGCACACACGAGGT GAATCGCCTGCGAA ACTACTTGCCGGCGA GCAGAAGCTCATCTC CGAGGAGGACCTGG ATGAGATGCTGCAG GCTTTTTCTCGAGTG CCAT	GPAT-Myc R ATG GCA CTC GAG AAA AAG CCT GCA GCA TCT CAT CCA GGT CCT CCT CGG AGA TGA GCT TCT GCT CGC CGG CAA GTA GTT TCG CAG GCG ATT CAC CTC GTG TGT GCG CGC GCA GCT CTG GC
gRNA-GPAT	gnaF ATCGCCCGCAAAGCT CCGTTTTAGAGCTAG AAATAGC	4883rev AACTTGACATCCCC ATTTAC
S244A TgGPAT	GPAT244Af ACACGAGGTGAAGC GCCCGCAAAGCTC	GPAT244Ar GAGCTTTGCGGGCG CTTCACCTCGTGT

S278A TgGPAT	GPAT278Af AGCAAGAGTGCAGC AGCGCCTCTCGGG	GPAT278Ar CCCGAGAGGCGCTG CTGCACTCTTGCT
TgGPAT myc or ty tagged overexpression	CAGAATCCCTTTT CGACAAAATGTATTT CCTTGTCCGGT	CAATGCATGGAGA ATTCCTCTGC