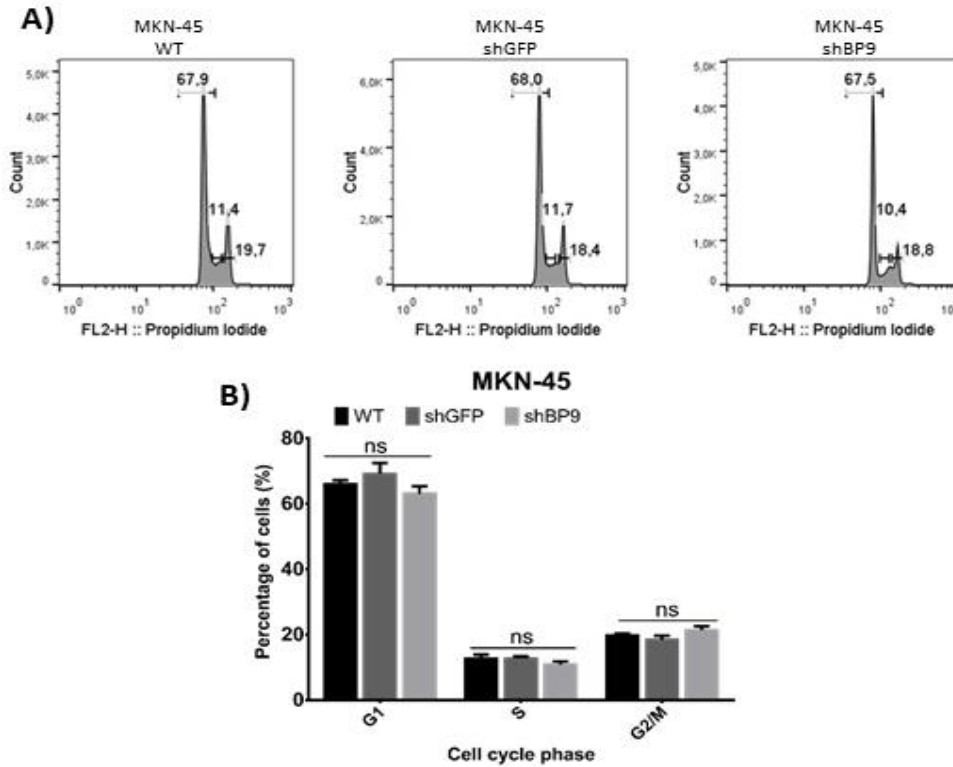**Table S1.** Primer sets used for RT-qPCR analysis.

Gene	Common Name	GenBank Accession	Abbreviation	Primer Pair, Sense (5′–3′)	Product Size (bp)
KCNK9	K2P9, TASK-3	NM_001282534.1	qHsKCNK9_F1	5′-GTC TCA TTT TCC CCC ACC TTT CCA G-3′	148
			qHsKCNK9_R1	5′-GGG TGG GGT GAG AAA TGT AAG GCA-3′	
KCNK3	K2P3, TASK-1	NM_002246.2	qHnP3_F	5′-GGT GCT CAT CGG CTT CTT CT-3′	199
			qHnP3_R	5′-GAA GCT GAA GGC CAC GTA CT-3′	
CCNA1	Cyclin A1	NM_003914.3	qHsCCNA1_F	5′-TGA AAT AAG GCA CAG ACC CAA AGC A-3′	89
			qHsCCNA1_R	5′-ACC AGC CAG TCC ACC AGA ATC GT-3′	
CCND1	Cyclin D1	NM_053056.2	qHsCCND1_F	5′-GCT CCT GTG CTG CGA AGT GGA A-3′	126
			qHsCCND1_R	5′-TTT GAA GTA GGA CAC CGA GGG CG-3′	
CCNE1	Cyclin E1	NM_001238.2	qHsCCNE1_F	5′-AAG GTT TCA GGG TAT CAG TGG TGC G-3′	191
			qHsCCNE1_R	5′-GGC TTT CTT TGC TCG GGC TTT G-3′	
CDK4	CDK4	NM_000075.3	qHsCDK4_F	5′-TCG TGA GGT GGC TTT ACT GAG GCG-3′	194
			qHsCDK4_R	5′-TCC TTG ATC GTT TCG GCT GGC A-3′	
CDKN1A	p21, Cip1	NM_001291549.1	qHsCDKN1A_F	5′-TGT CCG TCA GAA CCC ATG C-3′	139
			qHsCDKN1A_R	5′-AAA GTC GAA GTT CCA TCG CTC-3′	
CDKN1B	p27, Kip1	NM_004064.4	qHsCDKN1B_F	5′-GGG TCT GTG TCT TTT GGC TCC GA-3′	94
			qHsCDKN1B_R	5′-CCG CCT CTC TCG CAC TCT CAA A-3′	
RPL19	L19	NM_000981	qHsRPL19_F	5′-CAT CCG CAA GCC TGT GAC G-3′	132
			qHsRPL19_R	5′-TGT GAC CTT CTC TGG CAT CG-3′	

K2P, two-pore domain potassium channels; TASK-1 and TASK-3, TWIK-related acid-sensitive K+ channels 1 and 3; DRAM1, CCNA1, CCND1 and CCNE1, Cyclins A1, D1, and E1; CDK4, Cyclin-Dependent Kinase 4; CDKN1A and CDKN1B, Cyclin-Dependent Kinase Inhibitors 1A and 1B; RPL19, ribosomal protein L19.

Figure S1. Quantutation of cell cyclen phases by propidium iodide staining in MKN-45 cells. (**A**) Histograms. Representing distributions of fluorescence intensity among wild type (WT) MKN-45 cells or the same cells. Transduced with an shRNA against GFP (shGFP) or Task-3 (shBP9) after staining with propidium iodide. (**B**)Percentage of cells in G1, S and G2/M cell cycle phases based on percentages obtained in A. Error bars correspond. To the mean ± SME of three independent experiments. Cell cyle phases were evaluated by two-way ANOVA test with a $p \leq 0.05$ ns = no significant difference.