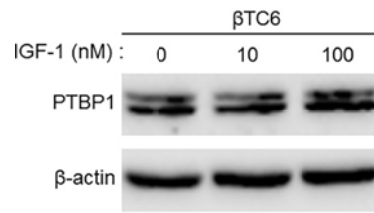
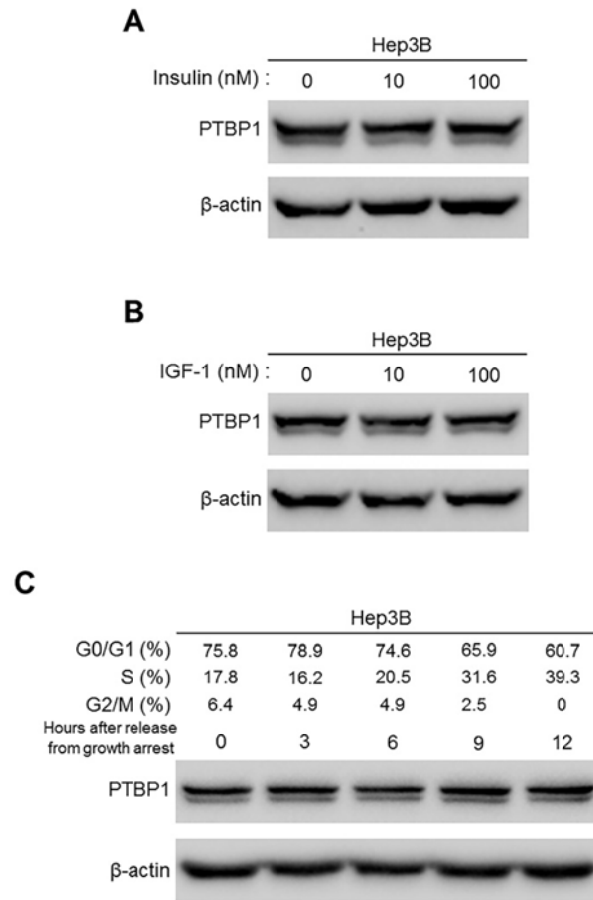


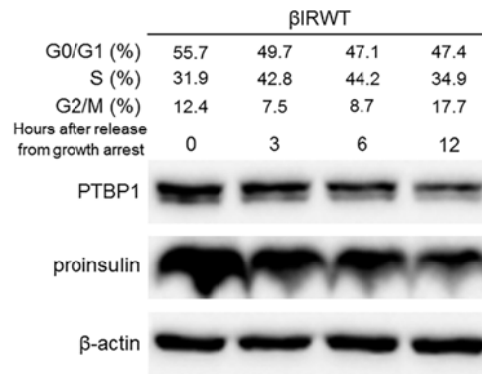
Supplementary Fig. S1. Levels of *insulin* mRNA in β IRWT and β IRKO cells. Levels of *insulin* mRNA were assessed by RT-qPCR analysis and mRNA amounts were normalized to the levels of *18S* rRNA. Data represent the mean \pm SEM from at least three independent experiments. * $P < 0.05$ versus the β IRWT group using Student's *t*-test.



Supplementary Fig. S2. Levels of PTBP1 in β TC6 cells treated with IGF-1. β TC6 cells were starved for 12 h in DMEM containing 5 mM glucose and 0.1% FBS and further incubated for 12 h with the indicated concentrations of IGF-1. Levels of PTBP1 and β -actin were assessed by western blot analysis.



Supplementary Fig. S3. Levels of PTBP1 and proinsulin in Hep3B cells. (A and B) Levels of PTBP1 and β -actin in Hep3B cells treated with insulin (A) or IGF-1 (B). Hep3B cells were starved for 12 h in DMEM containing 5 mM glucose and 0.1% FBS and further incubated for 12 h with the indicated concentrations of insulin (A) or IGF-1 (B). (C) Levels of PTBP1 and β -actin in Hep3B cells synchronized by double thymidine block for 24 h and then released for the indicated times. Levels of PTBP1 and β -actin were assessed by western blot analysis.



Supplementary Fig. S4. Correlation of PTBP1 and proinsulin levels during cell cycle progression. βIRWT cells were synchronized by double thymidine block for 24 h and then released for the indicated times. Levels of PTBP1 and proinsulin were assessed by western blot analysis.

Supplementary Table S1. Details of primary antibodies used in this study

Antibody	IHC or IF	WB	Specificity	Company
PTBP1	1:100	1:1000	Rabbit polyclonal	Abcam
Insulin	1:200		Guinea pig polyclonal	Millipore
		1:1000	Rabbit polyclonal	Santa Cruz
IRβ		1:1000	Rabbit polyclonal	Santa Cruz
p-IRβ (Tyr1162/1163)		1:1000	Rabbit polyclonal	Santa Cruz
Akt		1:1000	Rabbit polyclonal	Cell Signaling
β-actin		1:1000	Mouse monoclonal	Abcam

Supplementary Table S2. Details of siRNAs used in this study

	Source or sequence (5'–3')
<i>PTBPI</i>	AGA CCA GAG AUU UUA UUU UUU UU
<i>IR</i>	Santa Cruz (sc-35673)
<i>Akt</i>	Santa Cruz (sc-43610 and sc-38912)

Supplementary Table S3. PCR primer sequences

	Forward Primer (5'–3')	Reverse Primer (5'–3')
<i>GAPDH</i>	CGA CTT CAA CAG CAA CTC CCA CTC TCC C	TGG GTG GTC CAG GGT TTC TTA CTC CTT
<i>PTBPI</i>	TCC TGA CTG TGC AGG TCT TG	GGG GTC ACC GAG GTG TAG TA
<i>Insulin</i>	CCA CCC AGG CTT TTG TCA AA	CCC AGC TCC AGT TGT TCC AC