Figure S1. Effect of the CHO treatment on the cell viability and the transfection efficiency of miR-24 in MIN6 cells. (A) MIN6 cells were treated with 2.5, 5 mM or 10 mM soluble cholesterol for 12 h, and then the cell viability was measured using the cell counting kit-8 assay. *P<0.05 vs. the 0 mM CHO-treated group; (B) Changes in the levels of the miR-24 in MIN6 cells transfected with the miR-24 mimic/inhibitor were detected using reverse transcription-quantitative PCR. **P<0.01 vs. the Scr-treated group, Scr, scrambled miRNA sequence; CHO, cholesterol; miR, microRNA.
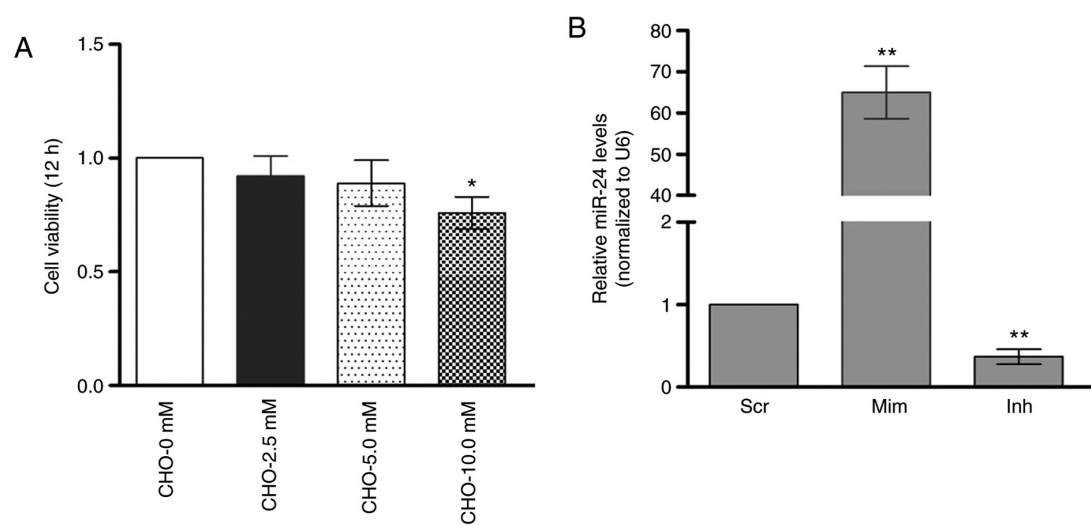
Figure S2. Direct inhibition of Sp1 function affects the levels of proteins involved in the Sp1/Scgn-FAK signaling pathway and attenuates insulin secretion in MIN6 cells. (A) A pretreatment with the Sp1 inhibitor MMA decreased the levels of the Scgn, p-FAK and p-paxillin proteins. (B) MMA pretreatment significantly attenuated GSIS in MIN6 cells. $^{**}P<0.01$ vs. the control. MMA, mithramycin A; p-FAK, phosphorylated-focal adhesion kinase; Scgn, secretagogin; MMA, mithramycin A.
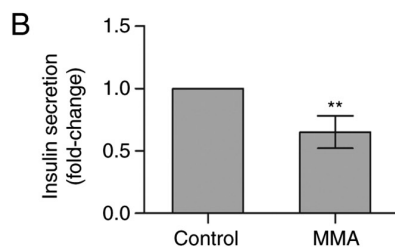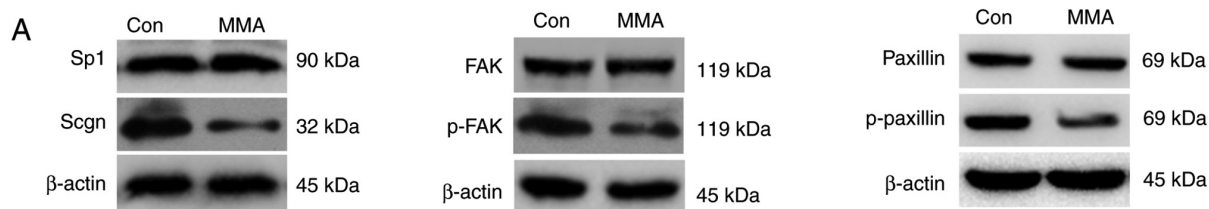
Table SI. List of the online databases used for bioinformatics analysis.

Database	Websites
miRBase	www.mirbase.org/search.shtml
TargetScan	www.targetscan.org
miRanda	www.microrna.org/microrna/home.do
RNAhybrid	bibiserv.techfak.uni-bielefeld.de/rnahybrid/submission.html
PROMO	alggen.lsi.upc.es/cgi-bin/promo_v3/promo/promoinit.cgi?dirDB=TF_8.3/
Tfsitescan	www.bitnos.com/info/tfsitescan-promoter-sequence-analysis
DBD	www.transcriptionfactor.org