

Supplementary materials

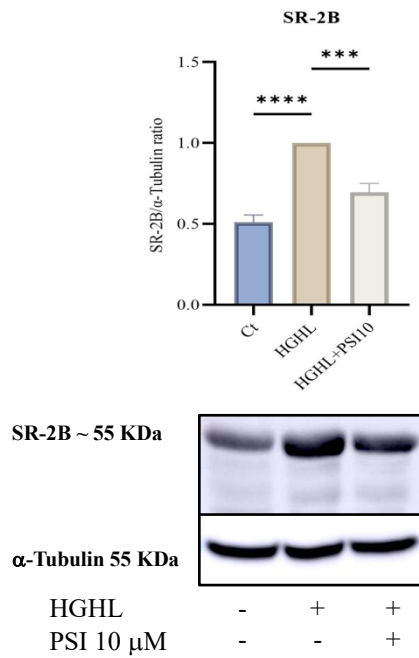


Figure S1. The immunoblot analysis of SR-2B in HG-HL-challenged β -cells in response to 10 μ psilocybin. Psilocybin administration reduced the elevated level of SR-2B in HG-HL-induced INS-1 cells. The results are depicted as the mean value with standard deviation, based on three measurements (N=3). Abbreviations used are Ct (Control), PSI (Psilocybin), and HG-HL (High glucose + High lipid). Significance is denoted by asterisks, with three implying $p < 0.001$ and four indicating $p < 0.0001$.

Table S1. Information of the primary antibodies

Primary antibody	Manufacturer	Cat #	Dilution
β -actin	Santa Cruz Biotechnology	sc-47778	1:200
Phospho-STAT3(Tyr-705)	Santa Cruz Biotechnology	sc-8059	1:200
STAT3	Santa Cruz Biotechnology	sc-8019	1:200
α -Tubulin	Santa Cruz Biotechnology	sc-8035	1:200
Caspase-3	Cell Signaling Technology	9662s	1:200
Caspase-7	Cell Signaling Technology	12827	1:1000
Bax	Cell Signaling Technology	2772s	1:1000
PDX-1	Cell Signaling Technology	D59H3	1:1000
FOXO1	Cell Signaling Technology	2880S	1:1000
Phospho-FOXO1 (Ser256)	Cell Signaling Technology	9461S	1:1000
β -actin	Abcam	ab8227	1:2000
Phospho-STAT1(S727)	Abcam	ab109461	1:1000
Caspase-9	Santa Cruz Biotechnology	sc-56076	1:100
Cleaved PARP (Asp214)	Cell Signaling Technology	9545	1:200
Bim	Cell Signaling Technology	C34C5	1:1000
Bcl-2	Santa Cruz Biotechnology	sc-7382	1:200
TXNIP	Cell Signaling Technology	14715	1:1000

Table S2: The sequences of primers used for q-RT-PCR

<i>Rat-Ins1</i>	Forward	GGGAACGTGGTTTCTTCTACA
<i>Rat-Ins1</i>	Reverse	CAGTGCCAAGGTCTGAAGAT
<i>Rat-NEUROD1</i>	Forward	GAACACGAGGCAGACAAGAA
<i>Rat-NEUROD1</i>	Reverse	TCATCTTCATCCTCCTCCTCTC
<i>Rat-MafA</i>	Forward	GGTCATCCGACTGAAACAGAA
<i>Rat-MafA</i>	Reverse	CTTCTCGCTCTCCAGAATGTG
<i>Rat-Ins2</i>	Forward	GGGAGCGTGGATTCTTCTACA
<i>Rat-Ins2</i>	Reverse	AGTGCCAAGGTCTGAAGGT
<i>Rat-Slc2A2</i>	Forward	CATAGTCACACCAGCACATACG
<i>Rat-Slc2A2</i>	Reverse	ACAGACAGAGACCAGAGCATAG
<i>Rat-PDX1</i>	Forward	CCCTTTCCCGTGGATGAAATC
<i>Rat-PDX1</i>	Reverse	GCTGTACGGGTCCTCTTATTCT
<i>Rat-FOXO1</i>	Forward	TCTACGAGTGGATGGTGAAGAG
<i>Rat-FOXO1</i>	Reverse	GGACAGATTGTGGCGAATTGA
<i>Rat-Tubulin</i>	Forward	TGACCCTCGCCATGGTAAATA
<i>Rat-Tubulin</i>	Reverse	GATGGTACGCTTGGTCTTGATG
<i>Rat-Nanog</i>	Forward	GCAGCTATTCTCAGGGCTATCT
<i>Rat-Nanog</i>	Reverse	TGGTCCAGGTCTGGTTGTT
<i>Rat-Pou5f1</i>	Forward	CCAAGCTGCTGAAACAGAAGAG
<i>Rat-Pou5f1</i>	Reverse	GTTGTCTGGCTGAACACCTTTC