

## Supplementary Material

### **BCL-XL overexpression protects pancreatic $\beta$ -cells against cytokine- and palmitate-induced apoptosis**

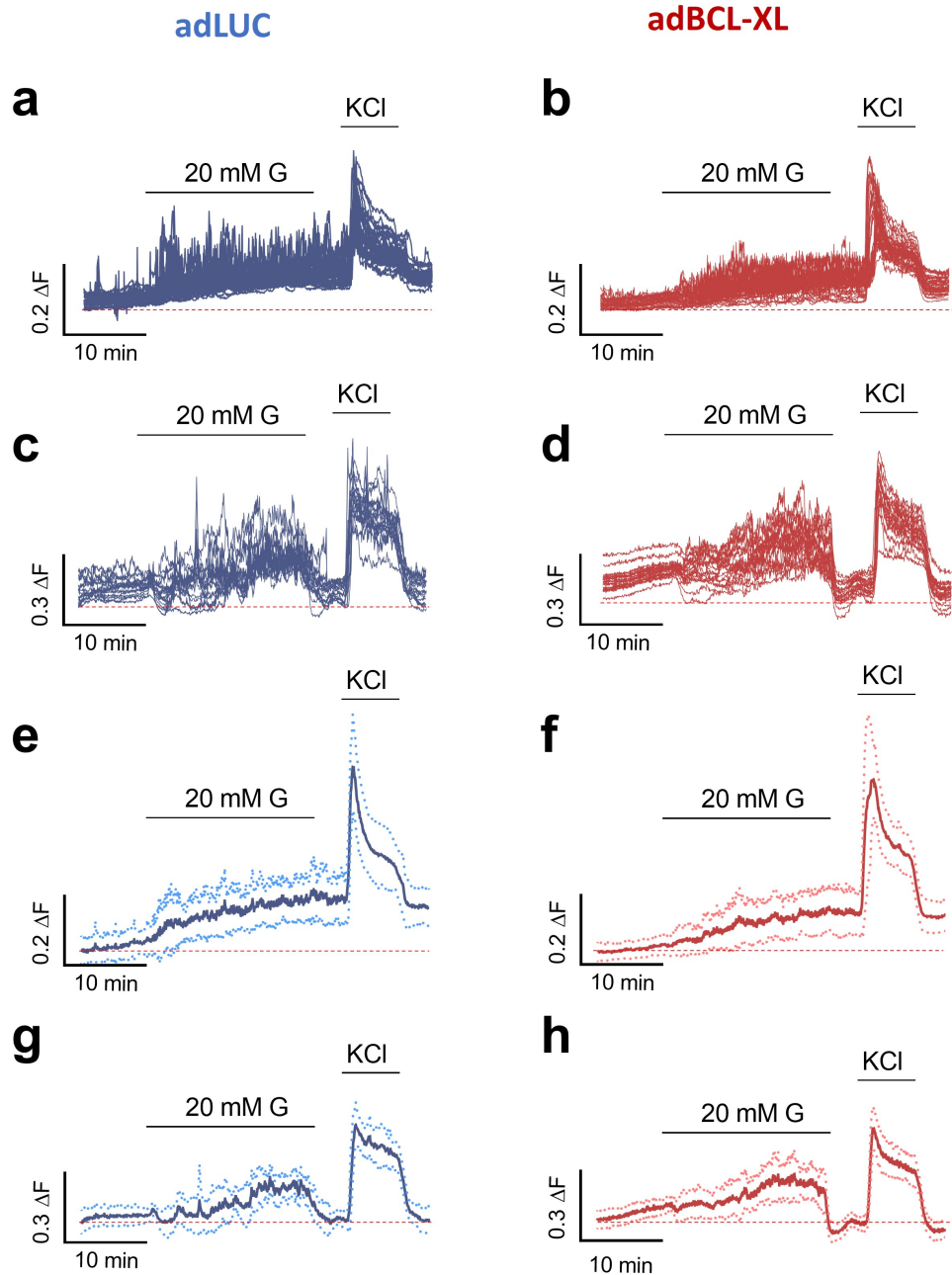
**Atenea A. Perez-Serna, Reinaldo S. Dos Santos, Cristina Ripoll, Angel Nadal, Decio L. Eizirik, Laura Marroqui**

**Supplementary Table S1. List of antibodies used in this study.**

<b>Target antigen</b>	<b>Antibody name</b>	<b>Manufacturer and Catalogue number (Cat. no)</b>	<b>Species raised in</b>	<b>Dilution</b>	<b>RRID</b>
BCL-XL	Bcl-xL (54H6) Rabbit mAb	Cell Signaling; Cat no. 2764	Rabbit, monoclonal	1:1000 (WB) 1:2000 (ICC)	AB_2228008
$\alpha$ -tubulin	Monoclonal Anti $\alpha$ - Tubulin antibody	Sigma; Cat no. T9026	Mouse, monoclonal	1:5000 (WB)	AB_477593
Goat anti-mouse IgG	Goat Anti-Mouse IgG (H+L) HRP Conjugate antibody	Bio-rad; Cat no. 170-6516 Goat	Goat, polyclonal	1:5000 (WB)	AB_11125547
Goat anti-rabbit IgG	Goat Anti-Rabbit IgG (H+L) HRP Conjugate antibody	Bio-rad; Cat no. 170-6515 Goat	Goat, polyclonal	1:5000 (WB)	AB_11125142
Alexa Fluor 568 goat anti-mouse IgG	Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody	Invitrogen; Cat no. A-11031	Goat, polyclonal	1:5000 (ICC)	AB_144696

**Supplementary Table S2. List of primers used in this study.**

	<b>Forward</b>	<b>Reverse</b>
	<b>Sequence (5'-3')</b>	<b>Sequence (5'-3')</b>
<b><i>β-actin</i></b>	CTGTACGCCAACACAGTGCT	GCTCAGGAGGAGCAATGATC
<b><i>INS</i></b>	GCTTCTTCTACACACCCAAGAC	CCACAATGCCACGCTTCT
<b><i>PDX1</i></b>	AAAGCTCACGCGTGGAAA	GCCGTGAGATGTACTTGTTGA
<b><i>MAFA</i></b>	TACAGGACGTGGACACCA	GTTCTCCGCTCAACCTCAG
<b><i>BIP</i></b>	ACCTCAGTCTCCCAGCTAAT	CCCTTGCCTGAGTAAAGATGT
<b><i>CHOP</i></b>	AACGGAAACAGAGTGGTCATT	GCTTGAGCCGTTTCATTCTCT
<b><i>XBPIs</i></b>	CCGCAGCAGGTGCAGG	GAGTCAATACCGCCAGAATCCA



**Supplementary Figure S1.** BCL-XL overexpression reduces intracellular  $\text{Ca}^{2+}$  oscillations in rat but not in human  $\beta$ -cells. INS-1E (**a,b,e,f**) and EndoC- $\beta$ H1 cells (**c,d,g,h**) were infected with adenoviral (ad) vectors encoding luciferase (adLUC, blue traces) or rat BCL-XL (adBCL-XL, red traces). After 48 h of recovery, intracellular  $\text{Ca}^{2+}$  dynamics was assessed using Fura-2AM fluorescence. (**a–d**) Recordings of Fura-2AM  $\text{Ca}^{2+}$  fluorescence in 44–53 individual cells, where each line represents a register (4–6 independent experiments per cell line). (**e–h**) Results are means  $\pm$  SD (dotted lines) from data presented in (**a–d**). The red dotted lines in the bottom indicate the baseline.