# **Supplementary Figure Legends**

**Figure S1.** A representative whole blot for western blot analysis of each protein in Figure 2D. Cells were treated with various concentrations of BZ for 24 h in 2% FBS/DMEM or 10% FBS/DMEM. Total cell extracts were analyzed by western blotting with antibodies against the cleaved forms of caspases (Cas-3, -8, -9 and -12) and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of vehicle-treated control (0 nM) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S2.** A representative whole blot for western blot analysis of each protein in Figure 2E. Cells were treated with various concentrations of CFZ for 24 h in 2% FBS/DMEM or 10% FBS/DMEM. Total cell extracts were analyzed by western blotting with antibodies against the cleaved forms of caspases (Cas-3, -8, -9 and -12) and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of vehicle-treated control (0 nM) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S3.** A representative whole blot for western blot analysis of each protein in Figure 2F. Cells were treated with 100 nM BZ or CFZ for the indicated times in 2% FBS/DMEM. Total cell extracts were analyzed by western blotting with antibodies against the cleaved forms of caspases (Cas-3, -8, -9 and -12) and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of vehicle-treated control (–/– at 4 h) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S4.** A representative whole blot for western blot analysis of each protein in Figure 3A. Cells were treated with vehicle or various concentrations of BZ or CFZ for 24 h. Cell lysates were analyzed by western blotting with antibodies against ER stress-associated proteins (GRP94, GRP78, p90 ATF6 $\alpha$ , ATF4, XBP1, and CHOP) and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of vehicle-treated control (0 nM) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S5.** A representative whole blot for western blot analysis of each protein in Figure 3B. Cells were treated with vehicle or 100 nM BZ or CFZ for the indicated times in 2% FBS/DMEM. Cell lysates were analyzed by western blotting with antibodies against ER stress-associated proteins (GRP94, GRP78, p90 ATF6 $\alpha$ , XBP1, CHOP) and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of vehicle-treated control (-/- at 4 h) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S6.** A representative whole blot for western blot analysis of each protein in Figure 3C. Cells were treated with vehicle or 100 nM BZ or CFZ for the indicated times in 2% FBS/DMEM (B and C). Cell lysates were analyzed by western blotting with antibodies against

ER stress-associated proteins (P-eIF2 $\alpha$ , eIF2 $\alpha$ , and ATF4) and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of early time point (2 h in C) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S7.** A representative whole blot for western blot analysis of each protein in Figure 5A. Cells were pretreated with 5 mM NAC for 1 h and treated with a vehicle, 100 nM BZ or 100–200 nM CFZ for 24 h in 2% FBS/DMEM. Cell lysates were analyzed by western blotting with antibodies against cleaved caspase-3, CHOP, and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that in vehicle-treated control are indicated below each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S8.** A representative whole blot for western blot analysis of each protein in Figure 5B. Cells were pretreated with 100  $\mu$ M BSO (B) for 24 h and treated with a vehicle, 100 nM BZ or 100–200 nM CFZ for 24 h in 2% FBS/DMEM. Cell lysates were analyzed by western blotting with antibodies against cleaved caspase-3, CHOP, and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that in vehicle-treated control are indicated below each band. A representative whole blot for western blot analysis of each protein are shown below each band.

**Figure S9.** A representative whole blot for western blot analysis of each protein in Figure 6B. Cells were treated with BZ or CFZ alone, or combinations of BZ and CFZ for 24 h in 2% FBS/DMEM. Total cell extracts were analyzed by western blotting with antibodies against cleaved caspases, ER stress-associated proteins and  $\beta$ -actin. The band densities were normalized against  $\beta$ -actin and the fold changes compared to that of vehicle-treated control (– /–) are written under each band. A representative whole blot for western blot analysis of each protein are shown below each band.

# **Supplementary Figures**

## Figure S1 (suppl. data for Fig. 2D)





#### S1-2



S1-3







S1-5



Figure S2 (suppl. data for Fig. 2E)

S2-1



S2-2



S2-3







S2-5



Figure S3 (suppl. data for Fig. 2F)

S3-1



#### S3-2



S3-3







S3-5



Figure S4 (suppl. data for Fig. 3A)

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S4-3



**S4-4** 



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### S5-5







Figure S6 (suppl. data for Fig. 3C)

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Figure S7 (suppl. data for Fig. 5A)

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S7-3



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**S8-3** 





















