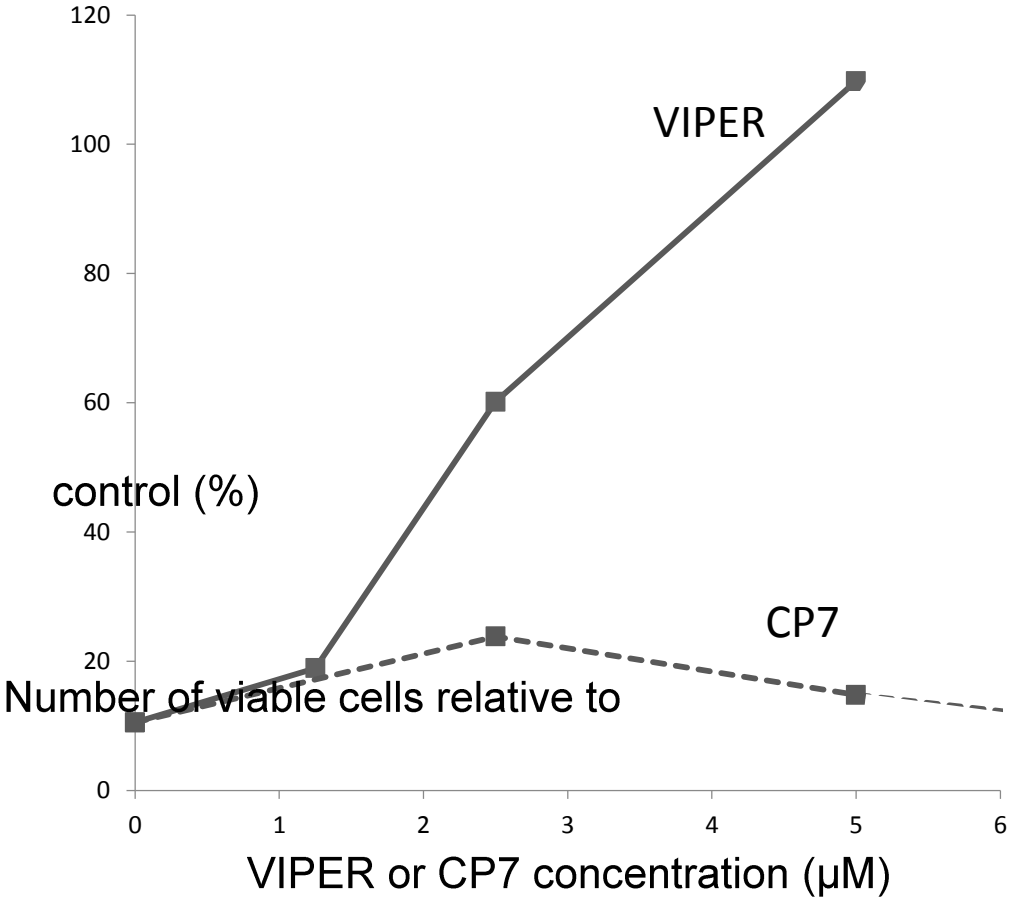
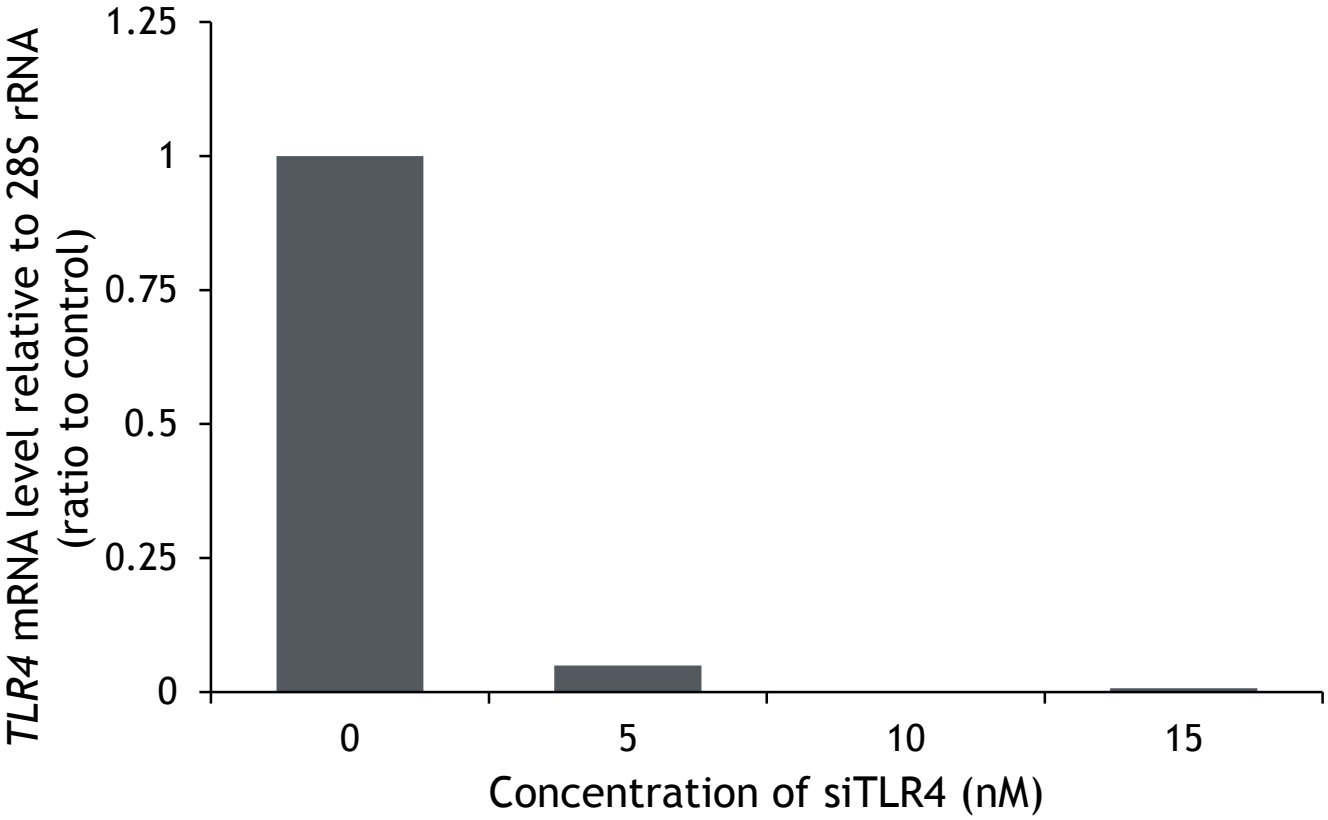


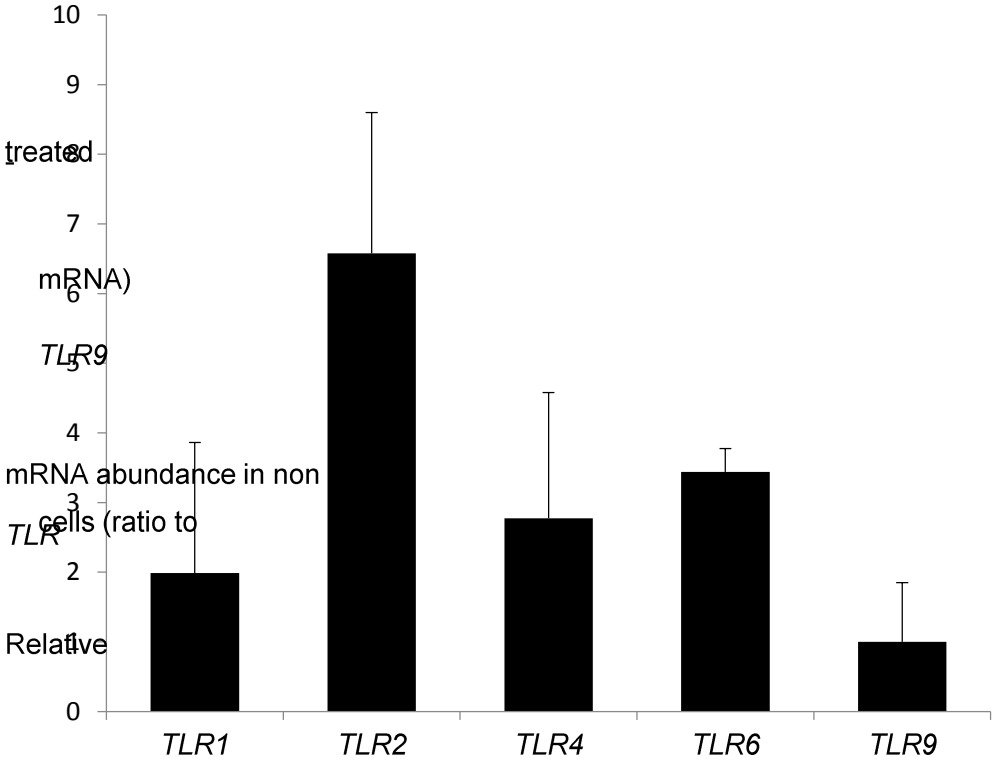
Supplementary Figure S1. Dose-dependent inhibitory effect of VIPER on GGA-induced cell death.

HuH-7 cells were treated with 20 μM GGA for 24 h in the presence of 0, 1.25, 2.5 or 5 μM VIPER (closed square and solid line) or CP7, control hepta-peptide (closed square and broken line).



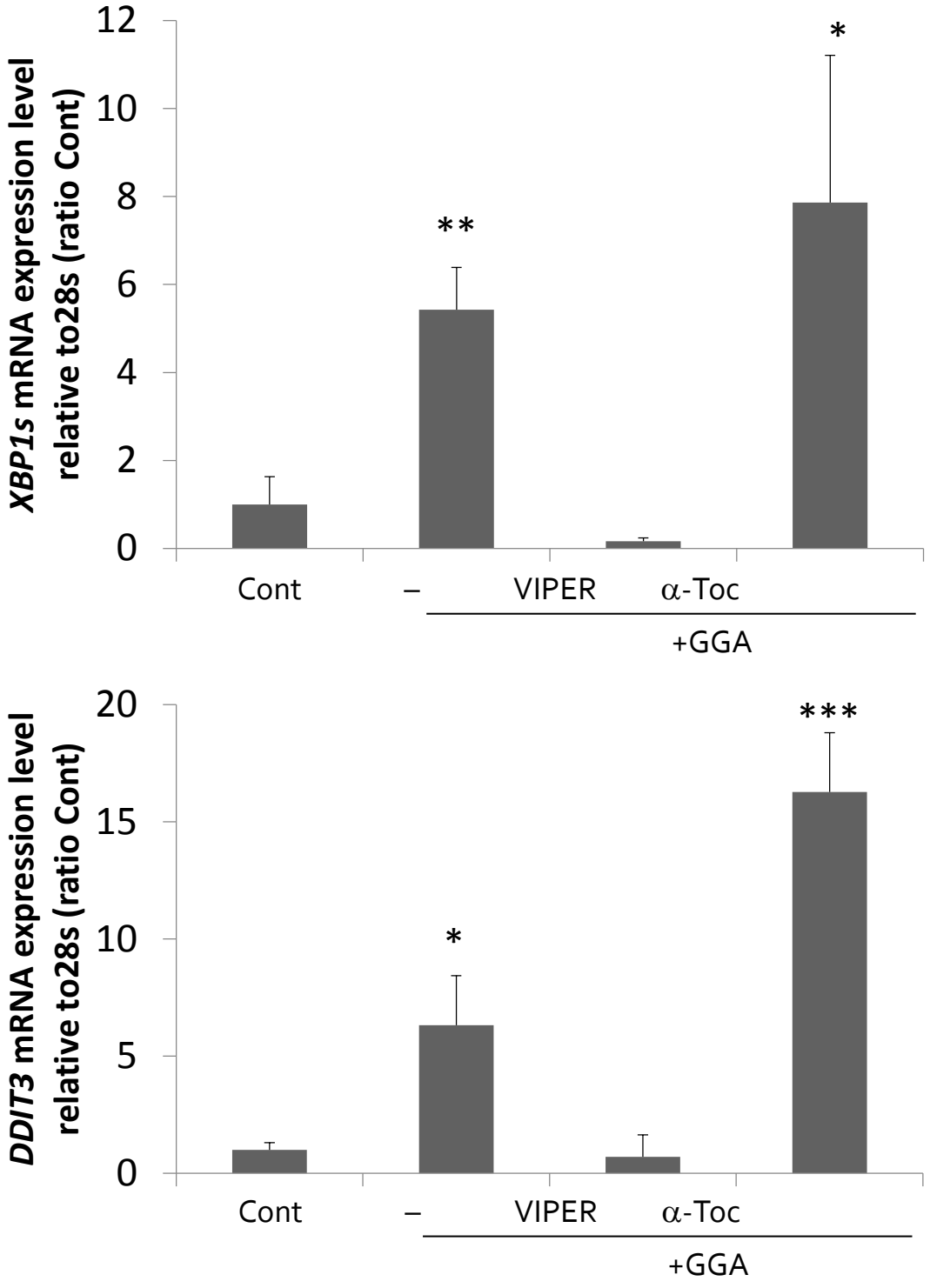
Supplementary Figure S2. Knockdown of the *TLR4* gene expression with siTLR4.

HuH-7 cells were treated with 5, 10, 15 nM *TLR4* siRNA (siTLR4) for 72 h. Total RNA was extracted to measure the cellular level of *TLR4* mRNAs by RT-qPCR.



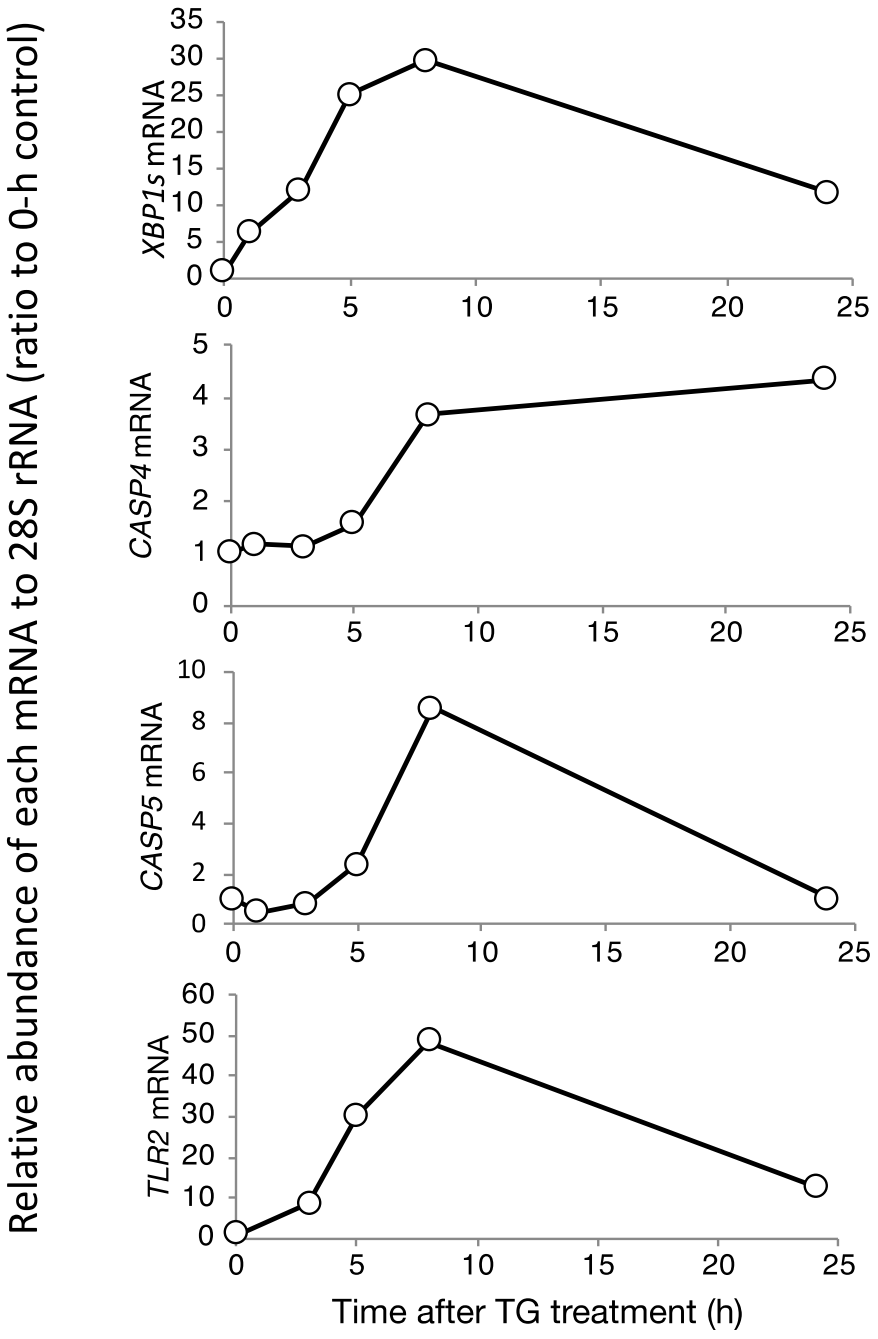
Supplementary Figure S3. Relative TLR mRNAs abundance in control HuH-7 cells.

Total RNA was extracted to measure the cellular levels of *TLR1*, *2*, *4*, *6* or *9* mRNA by RT-qPCR. The cellular baseline levels of *TLR* (*1*, *2*, *4*, *6* and *9*) mRNAs were plotted relative to the level of *TLR9* mRNA in control HuH-7 cells. Values are the means ± SD (n=3).



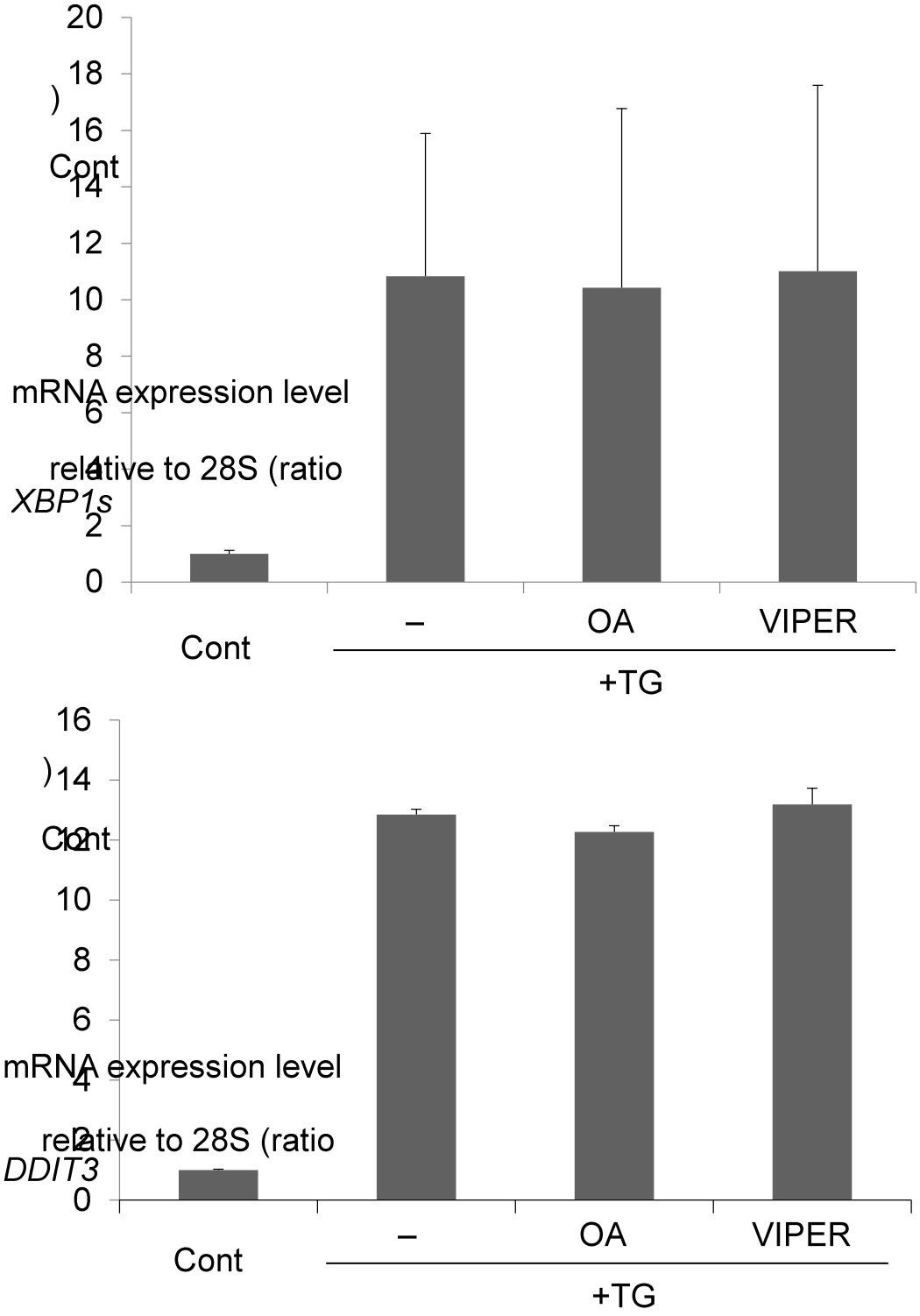
Supplementary Figure S4. Effects of α-tocopherol or VIPER on GGA-induced UPR.

HuH-7 cells were treated with 20 μM GGA for 3 h in the absence or presence of α-tocopherol or VIPER (100 or 5 μM, respectively). Total RNA was extracted to measure the cellular level of *XBP1s* or *DDIT3* mRNAs by RT-qPCR. *, **, *** indicate statistical significance ($p<0.05$, 0.01, 0.001, respectively), compared with each relevant control as determined by Student's *t*-test.



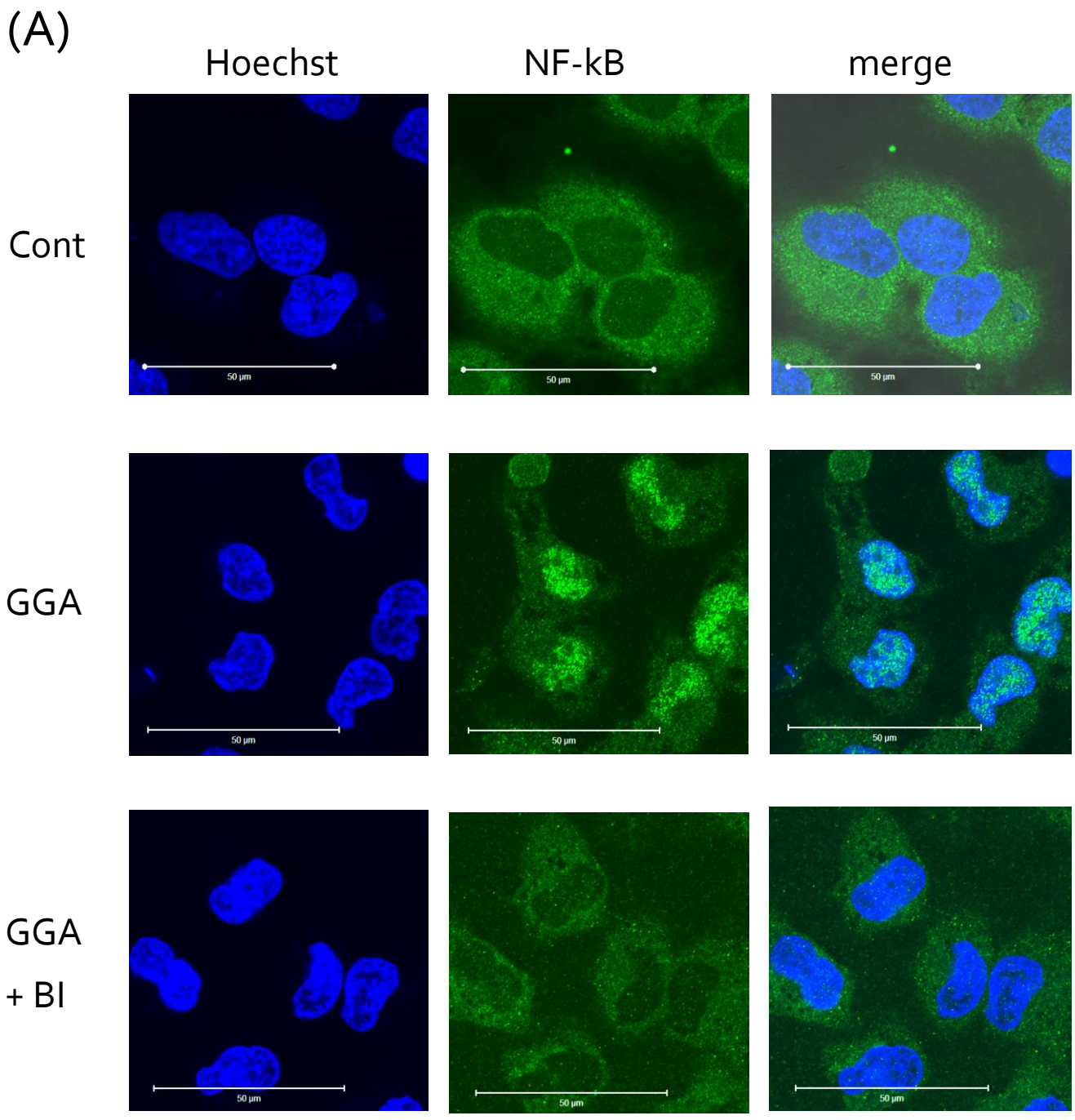
Supplementary Figure S5. Thapsigargin (TG) induces upregulation of CASP4/5 and TLR2 mRNAs.

HuH-7 cells were treated with 25 ng/mL TG, an inducer of UPR. Total RNA was extracted to measure the cellular level of *CASP4/5* or *TLR2* mRNAs by RT-qPCR.



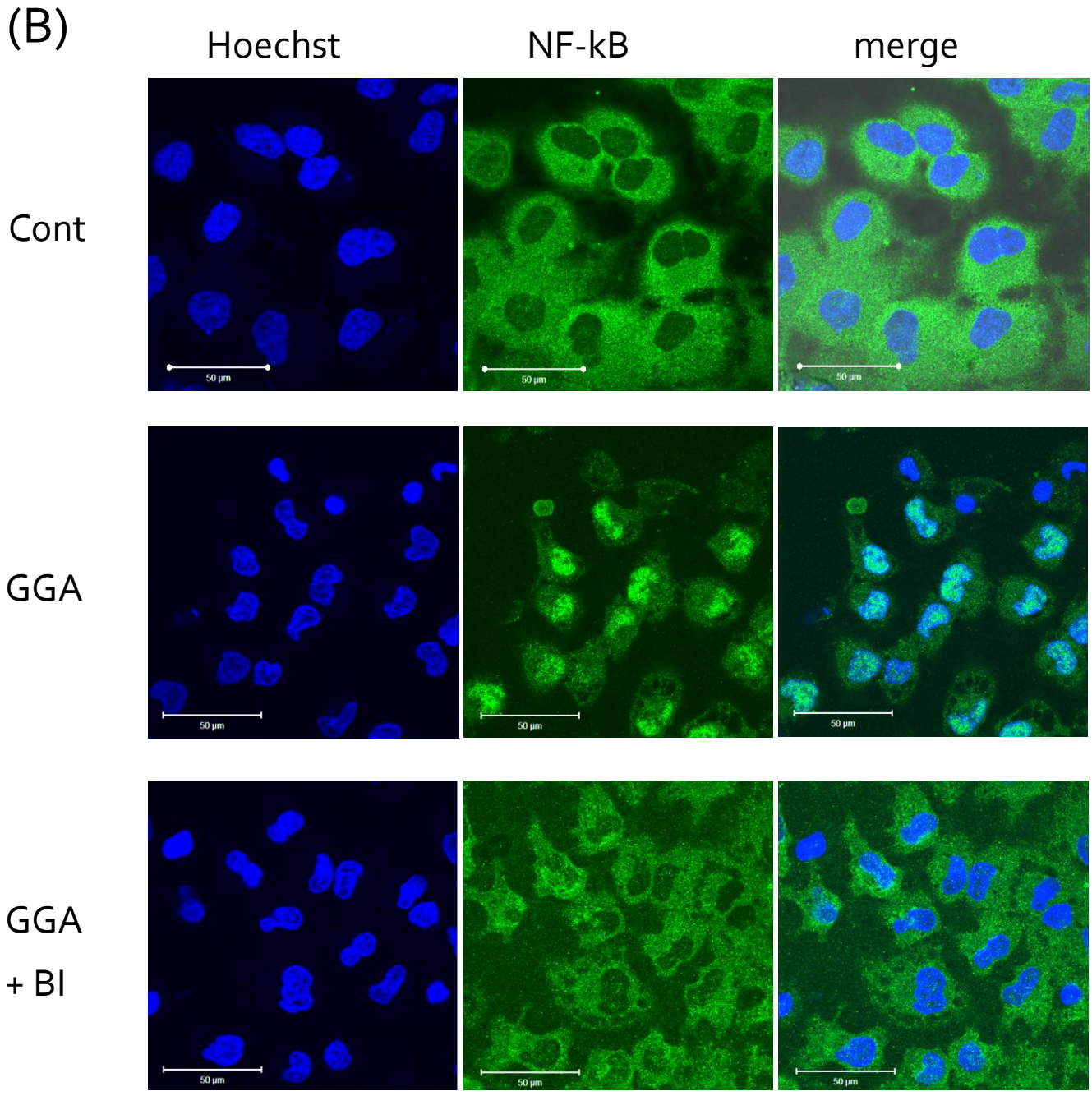
Supplementary Figure S6. Effects of VIPER or oleic acid on thapsigargin-induced UPR.

HuH-7 cells were treated with 25 ng/mL thapsigargin (TG) for 3 h in the absence or presence of OA or VIPER (50 or 5 μM, respectively). Total RNA was extracted to measure the cellular level of *XBP1s* or *DDIT3* mRNA relative to internal 28S rRNA by RT-qPCR.



Supplementary Figure S7. Effects of BI605906 on GGA-induced nuclear translocation of NF-kB protein.

HuH-7 cells were treated with 20 μM GGA for 3 h in the absence or presence of 5 μM BI605906 (BI). Immunofluorescent images were obtained for NF-κB signals (green), and nuclei were counter-stained with Hoechst 33258 (Hoechst) after 3-h treatment. Objective lens x40 (A) and x20 (B).



Supplementary Figure S7. Effects of BI605906 on GGA-induced nuclear translocation of NF-kB protein.

HuH-7 cells were treated with 20 μM GGA for 3 h in the absence or presence of 5 μM BI605906 (BI). Immunofluorescent images were obtained for NF-κB signals (green), and nuclei were counter-stained with Hoechst 33258 (Hoechst) after 3-h treatment. Objective lens x40 (A) and x20 (B).

Supplementary Table S1. Primer List for RT-qPCR

Genes	Primer	Sequence (5′-3′)
CASP4	F	TTGCTTTCTGCTCTTCAACG
	R	GTGTGATGAAGATAGAGCCCATT
CASP5	F	GTCTAAAGGACAAACCCAAGG
	R	TGTGAAGAGATGAGTGCCAAG
NLRP3	F	GTGTTTCGAATCCCACTGTG
	R	TGTGCTTCTCACGTACTTTCTG
IL1B	F	CCACAGACCTTCCAGGAGAA
	R	GTGATCGTACAGGTGCATCG
XBP1s	F	TGCTGAGTCCGCAGCAGGTG
	R	GCTGGCAGGCTCTGGGGAAG
DDIT3	F	ATGGCAGCTGAGTCATTGCCTTTC
	R	AGAAGCAGGGTCAAGAGTGGTGAA
TLR1	F	CCTAGCAGTTATCACAAGCTCAAA
	R	TCTTTTCCTTGGGCCATTC
TLR2	F	CGTTCTCTCAGGTGACTGCTC
	R	TCTCCTTTGGATCCTGCTTG
TLR4	F	CTGCCACATGTCAGGCCTTAT
	R	AATGCCCACCTGGAAGACTCT
TLR6	F	TGAAACAGTCTCTTTTGAGTAAATGC
	R	CAGAATCCATTTGGGAAAGC
TLR9	F	CCAGACCCTCTGGAGAAGC
	R	GTAGGAAGGCAGGCAAGGT
28S rRNA	F	TTAGTGACGCGCATGAATGG
	R	TGTGGTTTCGCTGGATAGTAGGT