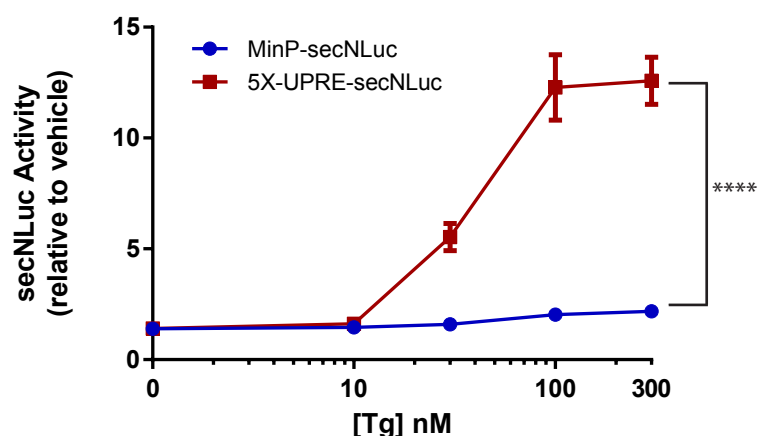
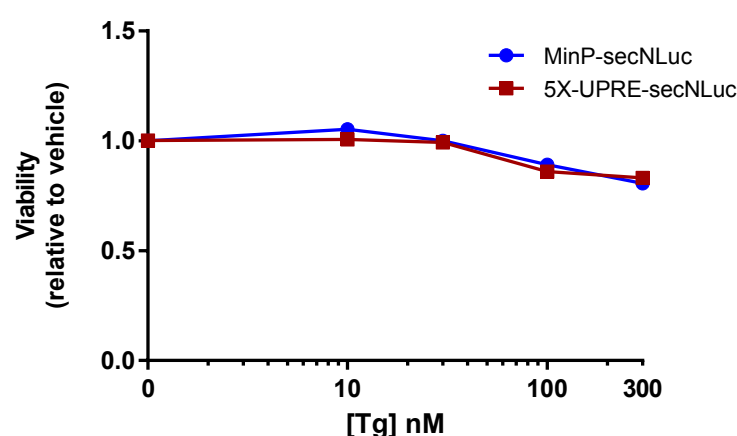


## Supplemental Figure 3- Further characterization of secNLuc constructs

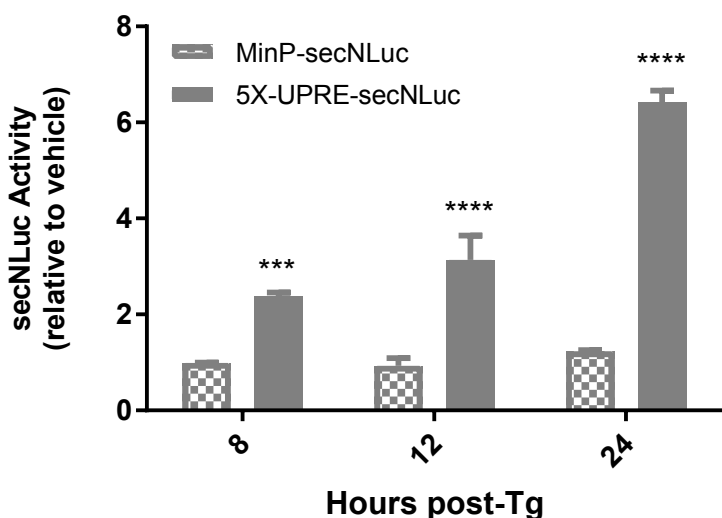
A



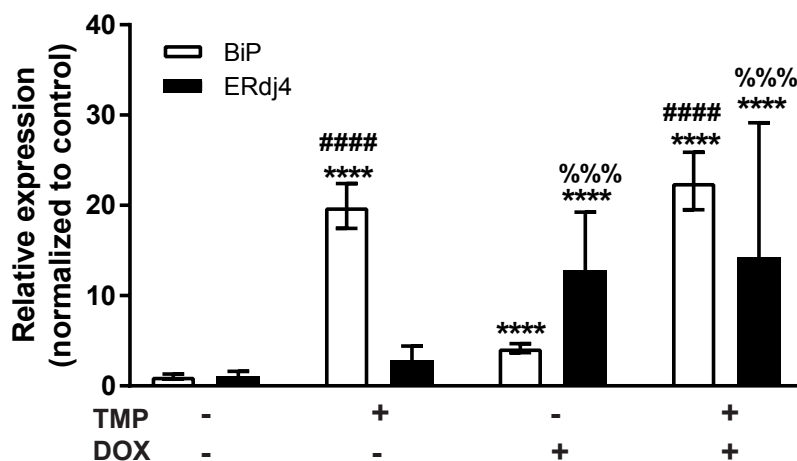
B



C



D



**Supplemental Figure S3: Further characterization of 5X-UPRE-secNLuc constructs.** (A) SH-SY5Y cells transfected with 5x-UPRE-secNLuc or MinP-secNLuc and treated with Tg (0-300nM) for 24 hrs (mean  $\pm$  SD, n=12 wells/Tg treatment, \*\*\*\*p<0.0001, 2-way ANOVA). (B) ATP viability of SH-SY5Y cells transfected with 5X-UPRE-secNLuc or MinP-secNLuc and treated with Tg (0-300nM) for 24 hrs (mean  $\pm$  SD, n=12 wells/Tg treatment). (C) SY5Y cells transfected with 5X-UPRE-secNLuc or MinP-secNLuc and treated with 100 nM thapsigargin for indicated time (mean  $\pm$  SEM, n=6 wells/timepoint \*\*\*p<0.001, \*\*\*\*p<0.0001, 2-way ANOVA, Sidak's multiple comparison test). (D) Relative expression of BiP and ERdj4 after 16 hrs activation of DHFR.ATF6 with 10  $\mu$ M trimethoprim (TMP) and/or XBP1 with 1  $\mu$ g/mL doxycycline (DOX) (mean  $\pm$  upper and lower limits ( $2^{\Delta\Delta Ct} \pm$ SD), n=6, \*\*\*\*p<0.0001 as compared to control, ####p<0.0001 as compared to DOX only, %%%p<0.001 as compared to TMP only, one-way ANOVA, Tukey's multiple comparison test).