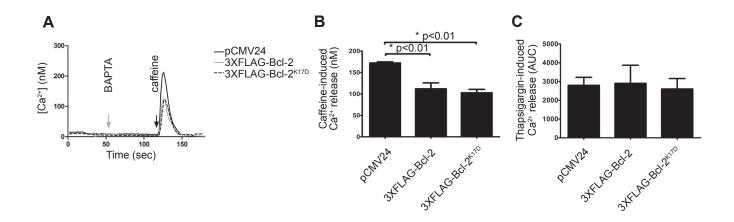


Supplementary figure 1: Quantification of the performed GST-pull downs. Each datapoint indicates the binding of 3XFLAG-Bcl-2 to the indicated GST domain normalized to the positive control, GST-IP<sub>3</sub>R1 domain 3, which was set at 1. Pull downs performed during the same experiment are indicated by the same color. All individual data points are given together with the median (horizontal bar) (n=5).



Supplementary figure 2: Fura-2 loaded, transfected (mCherry-positive) HEK RyR1 cells were selected for single-cell [Ca²+] measurements. (A) Average [Ca²+] traces (20 cells) from HEK RyR1 cells containing the pCMV24 vector, 3XFLAG-Bcl-2 or 3XFLAG-Bcl- $^{\text{K17D}}$  obtained in one experiment. The grey and black arrows respectively indicate the time points at which BAPTA (3 mM) or caffeine (4.5 mM) was administered. (B) Quantitative analysis of the caffeine responses in HEK RyR1 cells; values show averages  $\pm$  s.e.m. of at least 3 independent experiments (n>80 cells). (C) Quantitative analysis of ER Ca²+-store content. The ER Ca²+-store content was determined similarly as in panel A, with the exception that thapsigargin (1  $\mu$ M) was used instead of caffeine. The area under the curve (AUC) of the calibrated traces was used for determining the total ER Ca²+-store content. The bar graph indicates the average AUC  $\pm$  s.e.m. of at least 3 independent experiments (n>80 cells) for each condition.