5 (µg/mL) FKB 0 1.25 2.5 5 0 1.25 2.5 (35 KDa) Caspase-3 (19/17 KDa) 1.52 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.88 β-actin (43 KDa) 1.01 1.03 1.00 1.051.04 1.05 24 **Procaspase-3** 2.Ŕ (35 KDa) Caspase-3 (19/17 KDa) β-actin (43 KDa)

+Doxorubicin (0.5 µg/mL)

Figure S1. Uncropped Western blot images of the protein content of caspase-3, related to Figure 1C.



**Figure S2.** Uncropped Western blot images of the cytochrome levels c, caspase-3, caspase-9, and PARP, related to Figure 2A.



Fas L<br/>(40 KDa)Image: Image: Image:

**Figure S3.** Uncropped Western blot images of the protein levels FasL, Fas, and caspase-8, related to Figure 2C.



**Figure S4.** (**A**) Uncropped Western blot images of the conversion of LC3-I to LC3-II, related to Figure 4A. (**B**) Uncropped Western blot images of protein levels in ATG4B. Densitometric analysis measured relative changes in protein bands with the control as 1.0-fold as shown just below the gel data, related to Figure 4E.





**Figure S5.** (**A**) Uncropped Western blot images of the proteins Bax and Bcl-2. Relative changes in the Bax/Bcl-2 ratio have been measured using commercially available quantitative software with a control representing 1-fold, related to Figure 6A. (**B**) Uncropped Western blot images of the Beclin-1 and Bcl-2 proteins expression. Relative changes in the Beclin-1/Bcl-2 ratio were measured by commercially available quantitative software with a control as 1-fold, related to Figure 6B. (**C**) Uncropped Western blot images of the apoptotic proteins (caspase-3 and PARP) and autophagy markers (LC3-I/LC3-II and p62/SQSTM1), with co-treatment of 0, 1, 3, 6, 12, and 24 h after FKB (2.5  $\mu$ g/mL) and doxorubicin (0.5  $\mu$ g/mL), related to Figure 6C.







**Figure S6.** (**A–B**) Uncropped Western blot images of Inhibition of autophagy caused by FKB/doxorubicin suppressed apoptosis. Cells were pretreated with 3-MA (1 mM), related to Figure 7A–B. (**C**) Uncropped Western blot images of the monitored changes in the LC3-I/II and caspase-3 expressions, related to Figure 7C.





**Figure S7.** (**A–B**) Uncropped Western blot images of The effect of FKB and doxorubicin co-treatment on expression of LC3-I/II, caspase-3, and PARP was investigated and then changes in total and phosphorylated levels of ERK and JNK were assessed by Western blot, with caspase-3 and PARP expressions, related to Figure 8A–B.



**Figure S8.** (**A**) Uncropped Western blot images of the terms caspase-3, PARP, and LC3-I/II, related to Figure 10A. (**B–C**) Uncropped Western blot images of The monitored for the terms ATG4B and p-ERK, related to Figure 10B–C.



**Figure S9.** (**A**) Uncropped Western blot images of the the expression caspase-3, caspase-8, caspase-9, and PARP related to Figure 11D. (**B**) Uncropped Western blot images of The changes in the expression of Bax and Bcl-2 proteins, related to Figure 11E.