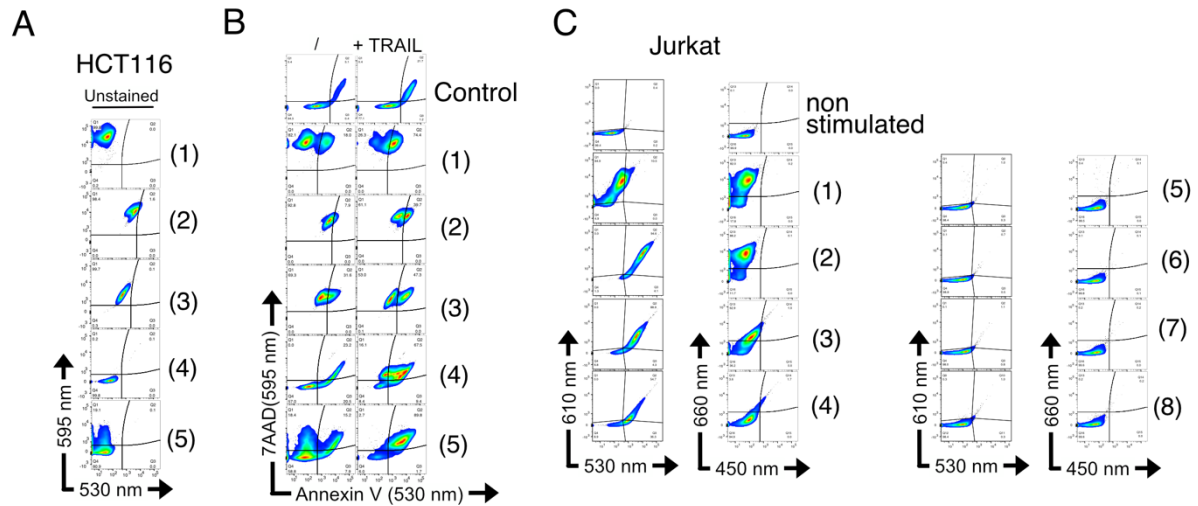
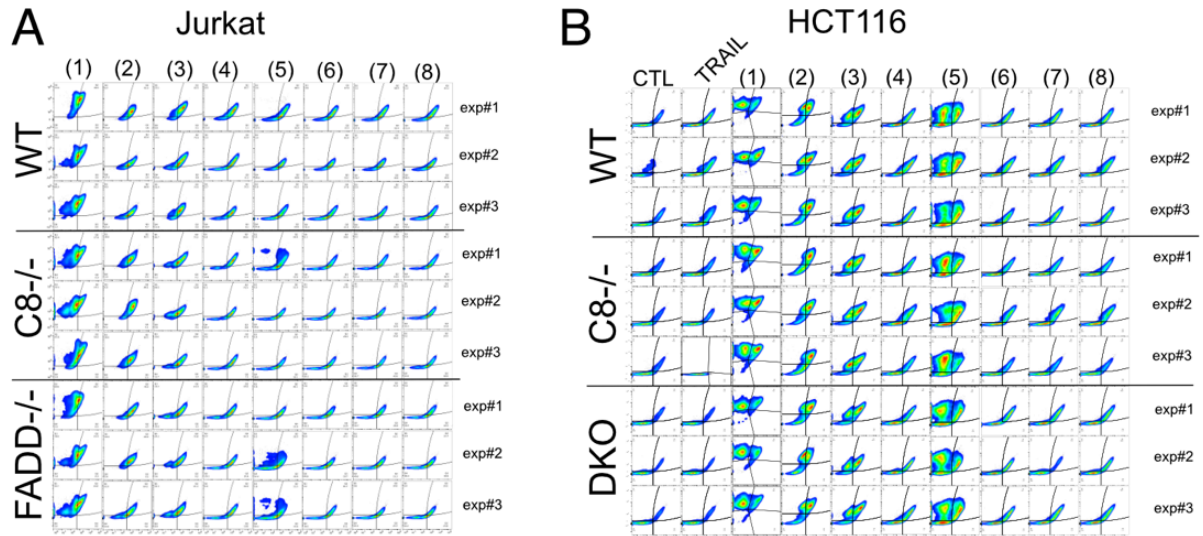


**Figure S1: LEGEND**

Flow cytometric analysis monitoring the effect of *pan*-caspase inhibitor (QvD) on marine compound-induced apoptosis in HCT116 colon cancer cell line. Cells were pre-incubated for 30 min with and without *pan*-caspase inhibitor QvD (10  $\mu$ M) then treated with marine compounds (50  $\mu$ M) or TRAIL (0.25 and 1  $\mu$ g/mL) for 24 h. following incubation, cells were stained with 7AAD and Annexin V and fluorescence was analyzed by flow cytometry.



**Figure S2: Autofluorescence screening and monitoring apoptosis-induced by marine compounds in HCT116 and Jurkat cells using flow cytometry.** (A &B) HCT116 cells were incubated with the depicted compounds for 24h and stained (A) or not (B) with 7AAD and Annexin V and fluorescence was analyzed by flow cytometry. (C) Jurkat cells were treated as above and compound-induced autofluorescence was assessed by flow cytometry at 450, 530, 610 and 660 nm.



**Figure S3: Detection of apoptosis induced by marine compounds in HCT116 and Jurkat isogenic cells.** (A) HCT116 (WT), Cas8-deficient HCT116-Cas8<sup>-/-</sup>, and TRAIL receptors deficient HCT116-TRAIL-R1/TRAILR2<sup>-/-</sup> (B) Jurkat WT, Jurkat-Caspase-8<sup>-/-</sup>, and Jurkat-FADD<sup>-/-</sup>. Isogenic cells were incubated with the compounds for 24 h and then subjected to dual staining with annexin V/7AAD/. Apoptosis rate was determined by flow cytometry.

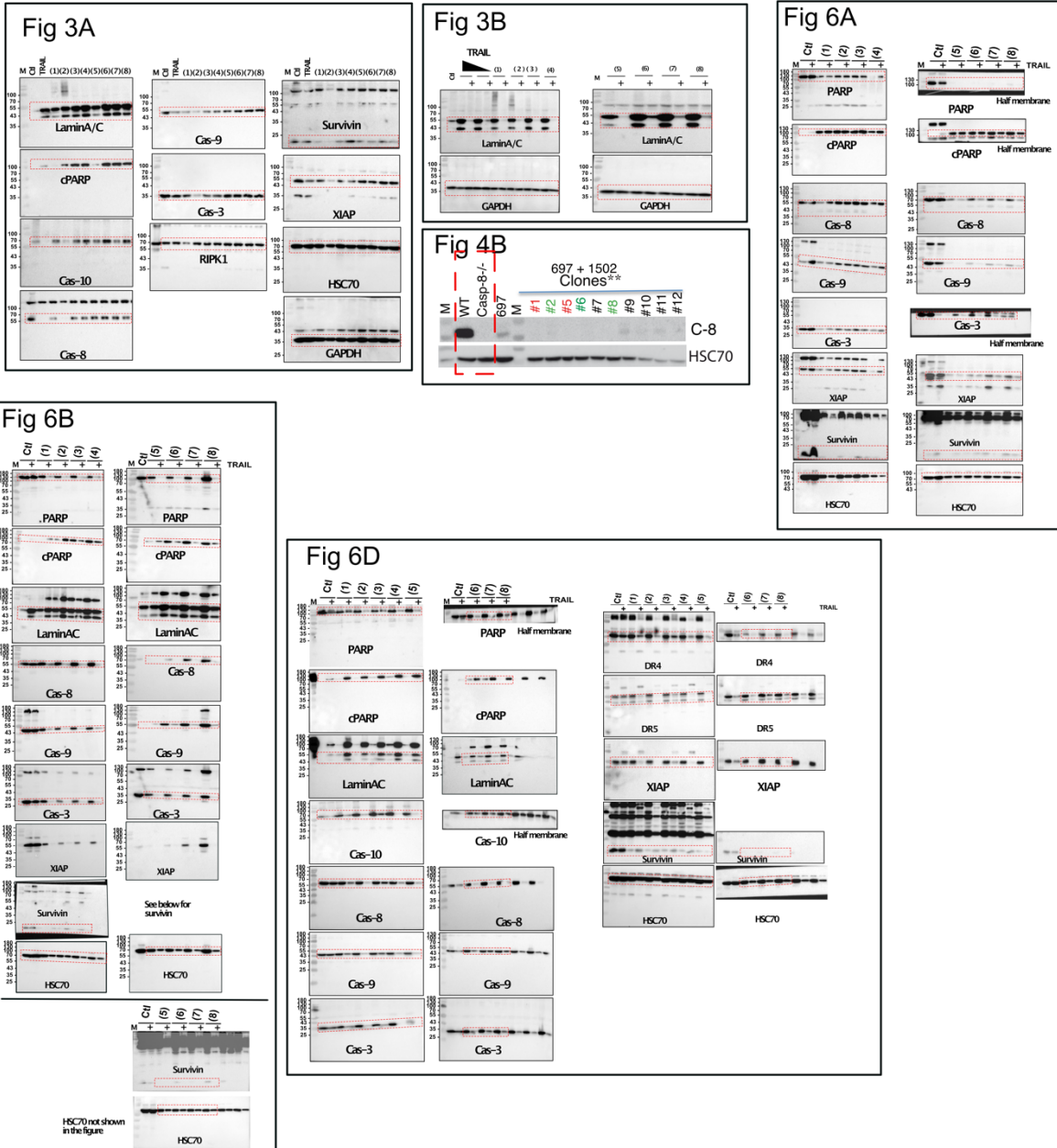


Figure S4: Raw data of the Western blots