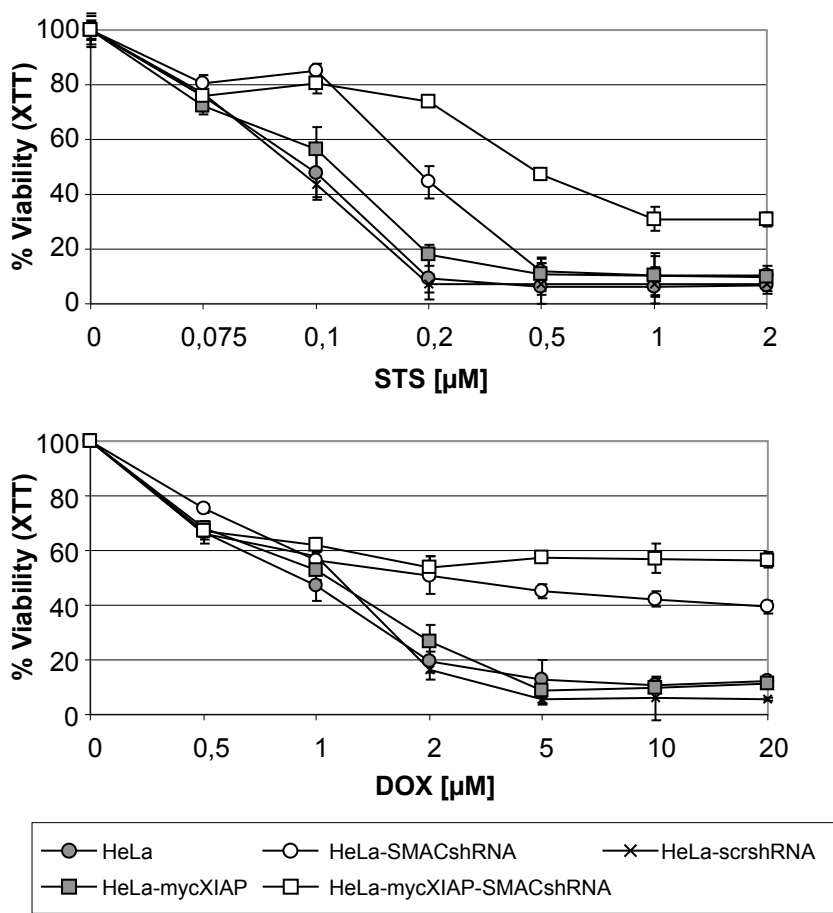
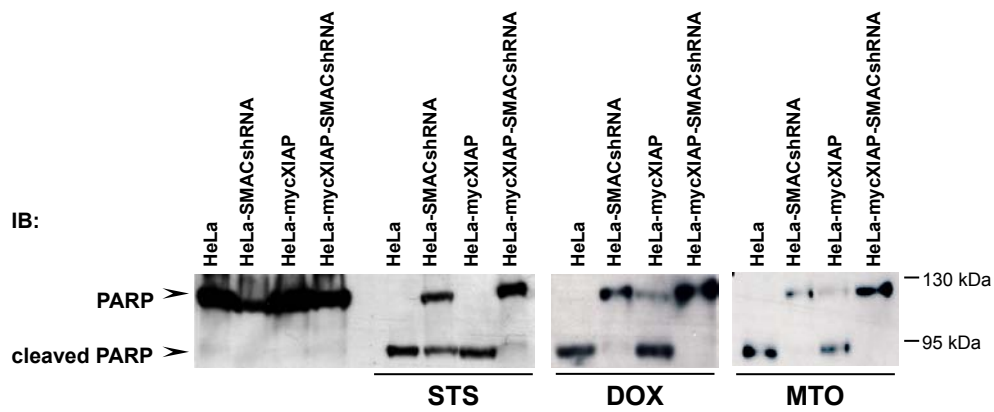


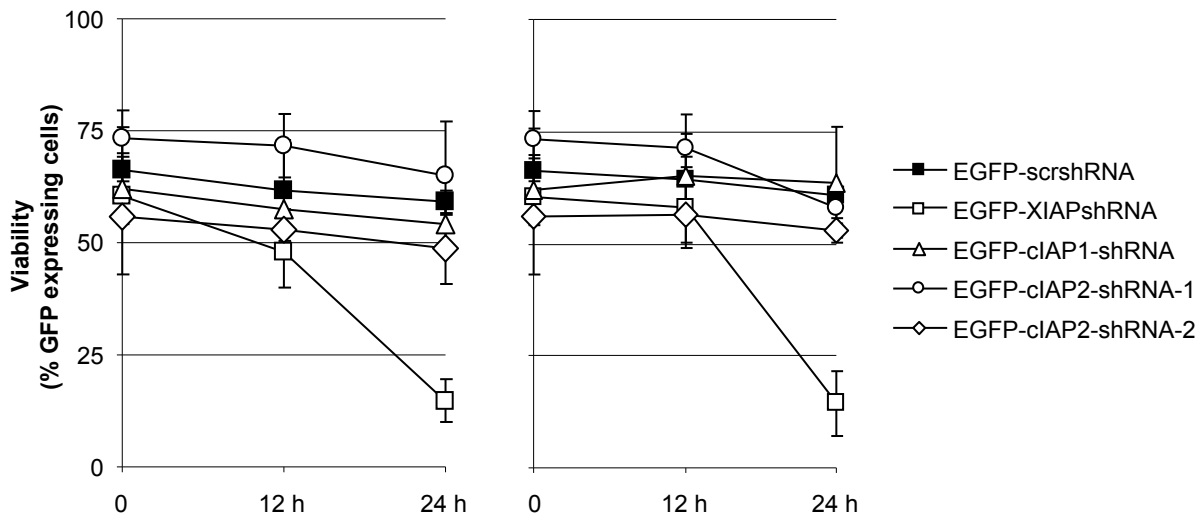
**Supplementary Fig. 1. (S1)** HeLa, HeLa-mycXIAP and HeLa-Bcl2 cell lines were left untreated or treated for 24 hours with staurosporine (STS, 0.5  $\mu$ M), doxorubicin (DOX, 5  $\mu$ M), etoposide (ETO, 100  $\mu$ M), mitoxantrone (MTO, 5  $\mu$ M), vinblastine (VBL, 50 nM), and vincristin (VCR, 50 nM). Viable cell number was determined using XTT. Cell death was determined by trypan blue exclusion. The experimental values represent mean  $\pm$  SD values from at least 3 individual experiments performed in triplicate. In order to examine the colonegicity 1000 cells were seeded in 12-well plates and incubated o. n. After 1h treatment with STS (0.5  $\mu$ M), DOX (5  $\mu$ M), MTO (5  $\mu$ M), VBL (0.1  $\mu$ M), VCR (0.1  $\mu$ M) or ETO (100  $\mu$ M) the cells have been washed twice with PBS and cultured for 14-21 days until colonies have formed. The counted colonies are shown as % of colonies formed by untreated cells.



**Supplementary Fig. 2. (S2) SMAC knock-down promotes resistance against cytostatic agents and facilitates XIAP anti-apoptotic function.** Cells were left untreated or treated for 24 hours with increasing concentrations of STS or DOX. The percentage viable cell number was determined using an XTT assay.



**Supplementary Fig. 3. (S3) SMAC is the central determinant of chemosusceptibility.** Cells were treated with STS, DOX or MTO for 12 h. PARP cleavage was detected in nuclear extracts using mouse anti-PARP antibody.



**Supplementary Fig. 4. (S4) XIAP knock-down restores inefficient apoptosis in HeLa-SMACshRNA cells.** HeLa-SMACshRNA cells were transiently transfected with DNA constructs encoding EGFP together with XIAPshRNA, scrshRNA or validated clAP1-shRNA or two independent clAP2-shRNAs expression cassettes. Transfected cells were treated with STS or DOX for 12 and 24 h. Viability was microscopically determined by evaluating >300 EGFP expressing cells. The percentage of viable EGFP expressing cells was calculated relative to the total cell number {Kashkar, 2005 #19). The values represent mean  $\pm$  SD values from 2 individual experiments performed in triplicate. Asterisk indicates nonspecific bands recognized by anti-XIAP antibody.