

Legends to Supplementary Figures:

FIGURE 1S: Transgenic expression of dnFADD or CrmA prevents FAS-induced apoptosis in human neuroblastoma cells. SH-EP cells infected with vectors coding for dnFADD, CrmA or with empty control vectors were treated for up to 48 hours with 0.1µg/ml anti-CD95 antibody, clone CH11 (Beckman Coulter, Fullerton, USA). Apoptotic cell death was measured by flow cytometric analyses of PI-stained nuclei.

FIGURE 2S: Bortezomib represses Bcl-xL mRNA steady state expression. Total RNA was prepared from SH-EP cells after treatment with 50nM bortezomib for 0, 3, 6, 9 and 16 hours and the level of bcl-xl mRNA was assessed by quantitative RT-PCR. Shown are the mean values of three independent experiments, each performed in triplicate.

FIGURE 3S: Transgenic BCL2 inhibits bortezomib-induced cell death. SH-EP cells were infected with a retrovirus coding for human BCL2 (1). Bulk-selected SH-EP-BCL2 cells and mock-infected controls (SH-EP-ctr) were treated with 50nM bortezomib for the times indicated and subjected to PI-FACS analyses. Bars represent mean of three independent experiments. Similar to Bcl-xL, transgenic BCL2 inhibits bortezomib-induced apoptosis in neuroblastoma cells.

FIGURE 4S: Transgenic expression of MCL1L protects against FAS, TRAIL and doxorubicin-induced apoptosis. SH-EP-ctr and SH-EP-Mcl1L cells were treated with (A) 0.1µg/ml CH11 antibody, (B) 5ng/ml recombinant human TRAIL (Alexis, CA, USA) or (C) the chemotherapeutic agent doxorubicin (0.25µg/ml) for the times indicated and subjected to PI-FACS analyses, respectively. Mean values represent three independent experiments.

FIGURE 5S: Stabilisation of p53 is not essential for induction of Noxa and Puma by bortezomib. Since Noxa and Puma are both transcriptional targets of p53 which was shown to be stabilized by bortezomib we assessed the effect of proteasome-inhibition by bortezomib on steady state protein levels of p53 and its target BAX. For this purpose SH-EP and STA-NB15 cells were cultured in the presence of 50nM bortezomib for 0, 4 and 8 hours and subjected to immunoblot analyses using antibodies directed against p53, BAX, GAPDH and α -Tubulin. p53 was stabilized in SH-EP cells whereas in STA-NB15 cells high levels of p53 were already detected in untreated cells suggesting that p53 is mutated in this cell line. However, bortezomib-treatment also led to some further accumulation of, presumably non-functional p53 in STA-NB15 cells. The pro-apoptotic p53 target BAX showed transitory elevation at four hours of bortezomib-treatment in SH-EP cells but remained unaffected in STA-NB15 cells, consistent with the assumption that p53 is mutated in STA-NB15 cells. The

combined data suggest that induction of Puma and Noxa by bortezomib does not depend on functional p53 in neuronal cells.

Supplementary References:

1. Obexer, P., Geiger, K., Ambros, P. F., Meister, B., and Ausserlechner, M. J. (2007) *Cell Death Differ* 14, 534-547

Supplemental Figures:

Fig. 1S:

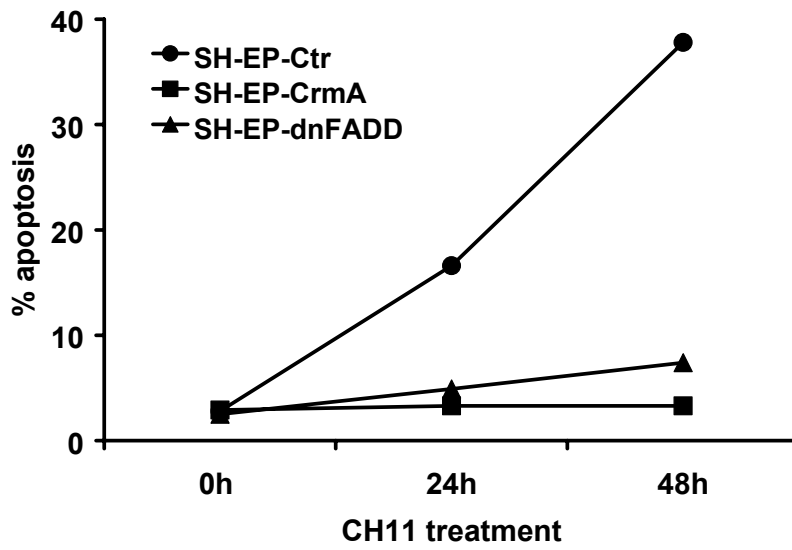


Fig. 2S:

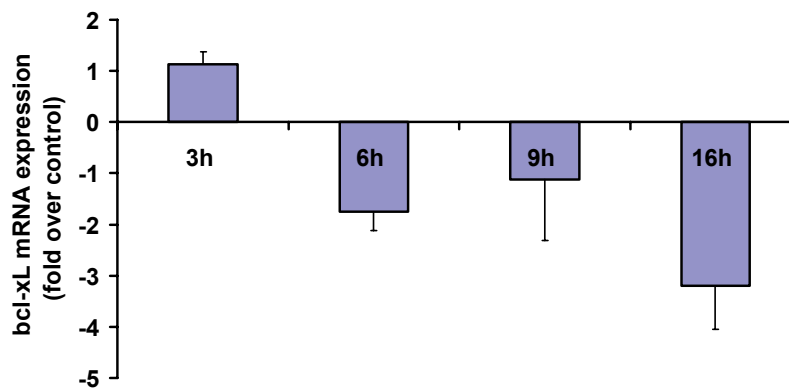
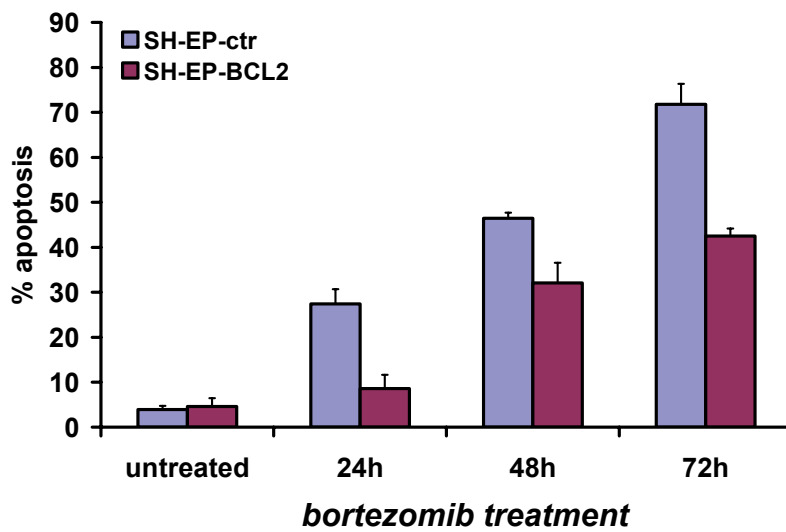
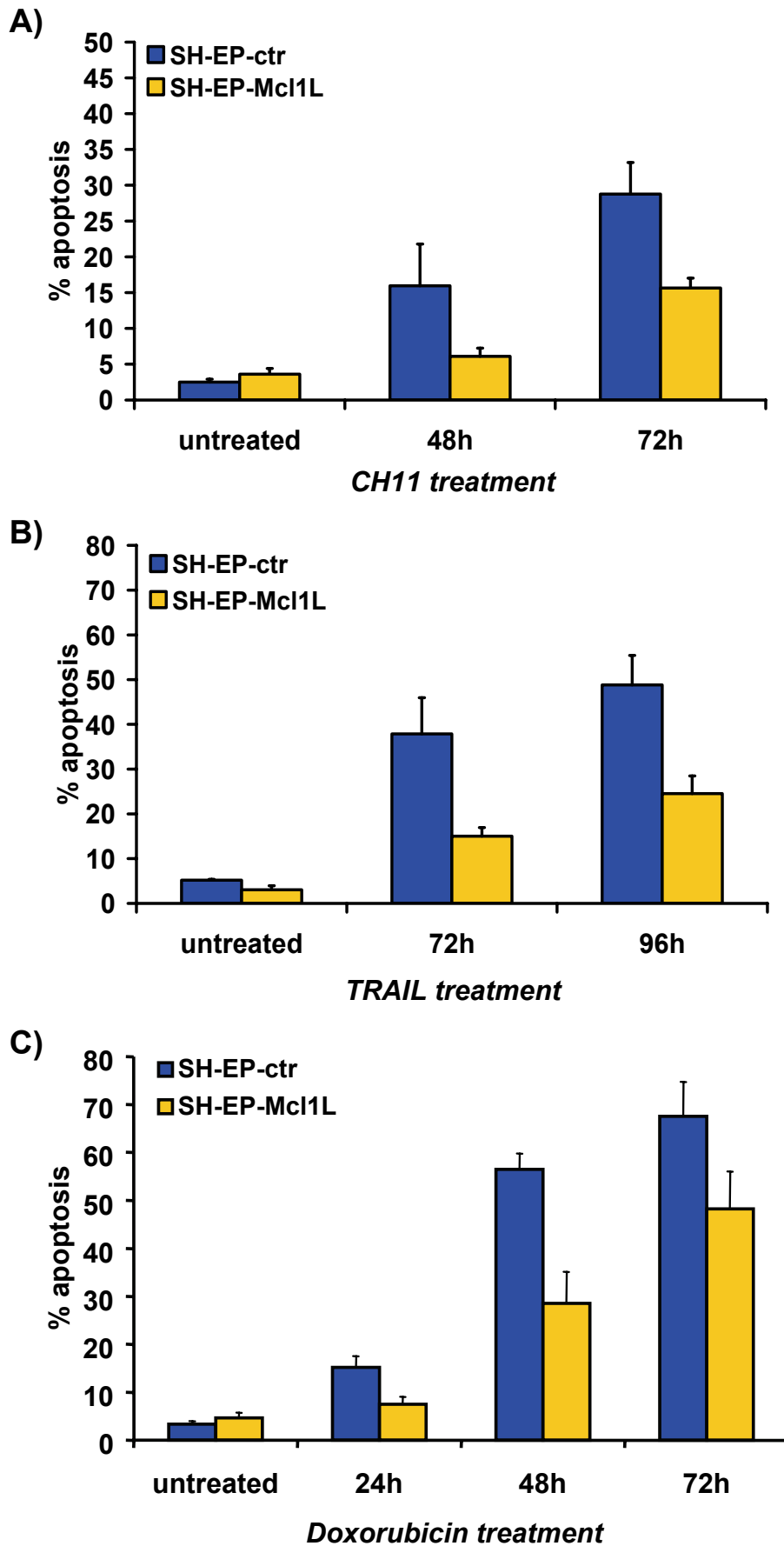


Fig. 3S:



Supplemental Figures:

Fig. 4S:



Supplemental Figures:

Fig. 5S:

