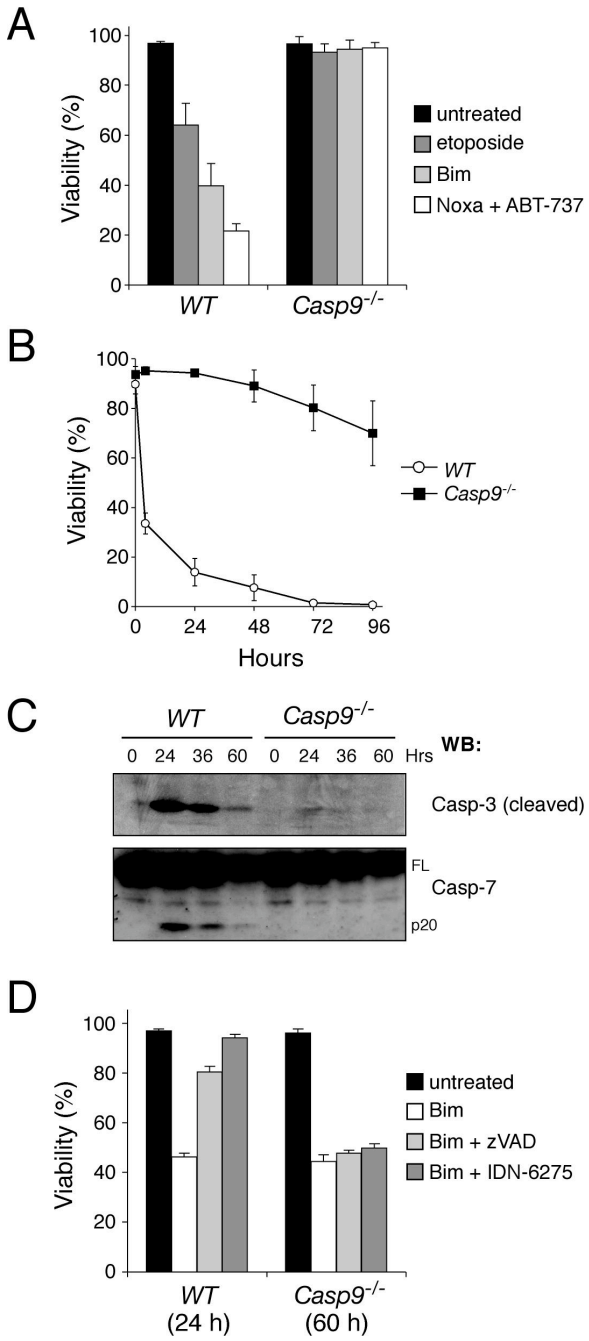
Apoptosis is impaired but not ablated in *Casp9*$^{-/-}$ MEFs



(A) *WT* and *Casp9*$^{-/-}$ MEFs were exposed to 50 μM etoposide, infected with a retrovirus encoding the potent BH3-only protein Bim (which neutralizes all Bcl-2 pro-survival family members), or infected with a retrovirus encoding the selective BH3-only protein Noxa (which neutralizes Mcl-1 and A1) and exposed to 2.5 μM ABT-737 (which neutralizes Bcl-2, Bcl-xL, and Bcl-w). Cell viability was measured after 24 h by PI staining. The data are presented as means +/- SEM for 3 independent experiments.

(B) *WT* and *Casp9*$^{-/-}$ MEFs stably expressing Noxa were exposed to 2.5 μM ABT-737. Cell viability was measured after the indicated times by PI staining. The data are presented as means +/- SEM for 3 independent experiments.

(C, D) *WT* and *Casp9*$^{-/-}$ MEFs were infected with a retrovirus encoding the BH3-only protein Bim. In (C), lysates were prepared at the indicated times post-infection and immunoblotted with antibodies recognizing the active subunits (p20) of caspase-3 and caspase-7 (FL = full-length). In (D), the cells were cultured in the presence of 50 mM zVAD-fmk, 50 μM IDN-6275, or no caspase inhibitor. Cell viability was determined by staining with PI followed by flow cytometry. For *WT* MEFs, viability was measured 24 h after infection. For *Casp9*$^{-/-}$ MEFs, viability was measured after 60 h, when cell death became apparent in the cultures. The data are presented as means +/- SEM from a representative experiment.