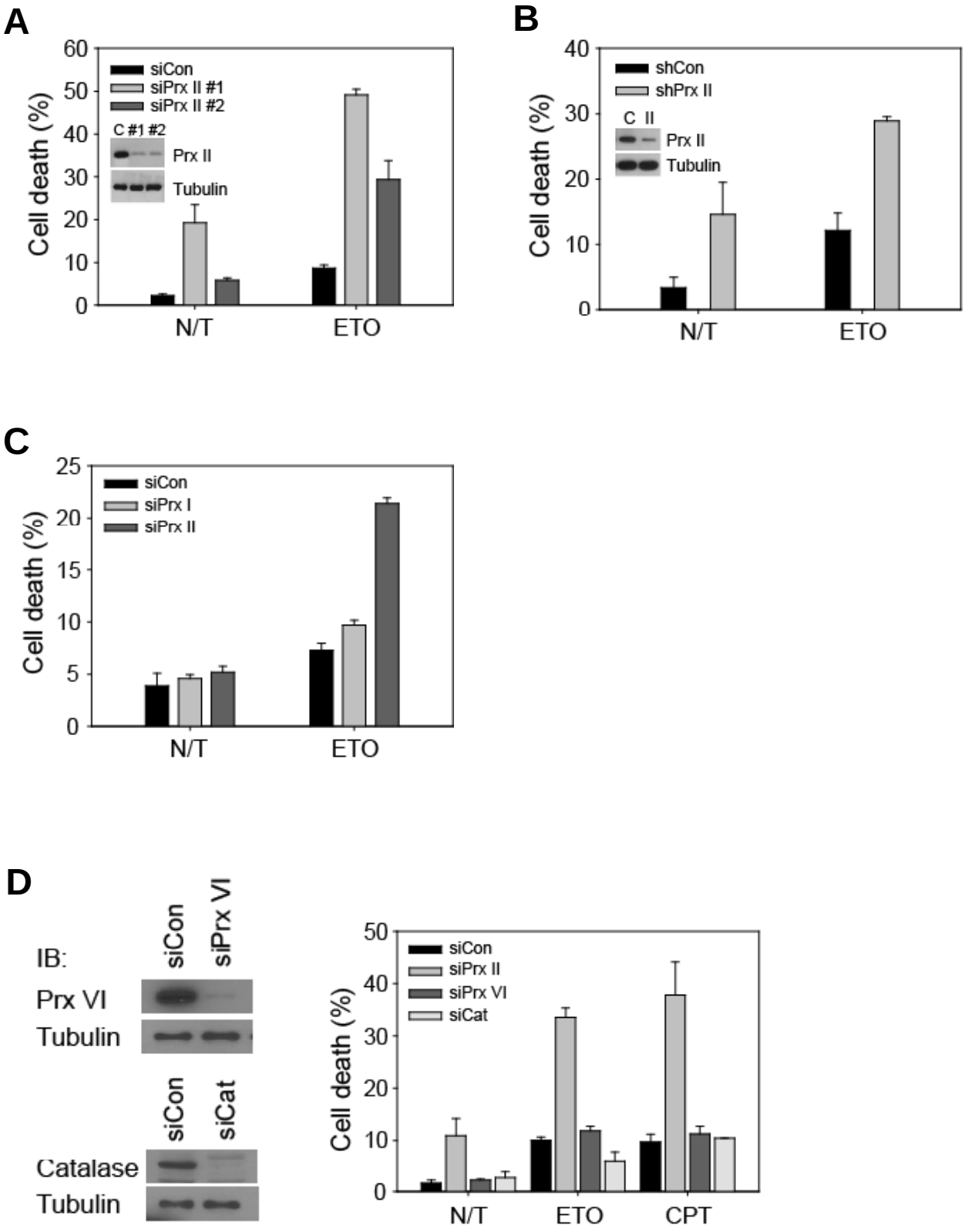
SUPPLEMENT FIGURE LEGENDS

Fig. S1. Selective effect of PrxII knockdown in DNA damage-induced cell death.
A. Effect of siRNA duplexes specific to PrxII in etoposide-induced cell death. HeLa cells were transfected with either control (siCon) or different PrxII siRNA duplexes (siPrxII#1 and #2) for 48 hrs, and then treated with etoposide (ETO). **B**. Effect of PrxII shRNA in ETO-induced cell death. HeLa cells were transfected with pSuper vector encoding either control luciferase or PrxII shRNA sequence for 48 hrs. **C**. ETO-induced death in HeLa cell transfected with control or PrxII siRNA for 24 hrs. **D**. Effect of catalase or PrxVI knockdown in DNA damage-induced cell death. HeLa cells were transfected with siRNA duplexes specific to either control, PrxII, catalase (Cat) or PrxVI (VI) for 48 hrs, and treated with the indicated agents. Knockdown of target gene expression is shown in each panel.

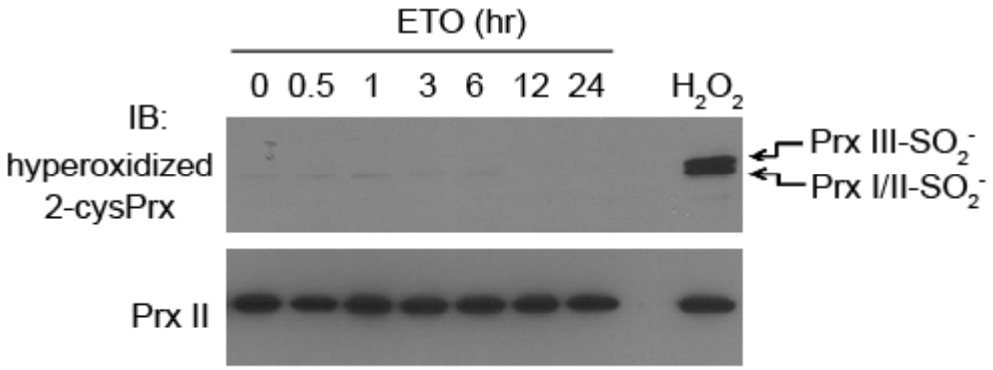
Fig. S2. Hyperoxidation of 2-cys Prxs by DNA damaging agents.
HeLa cells were treated with ETO for indicated times. After treatment, cell lysates were subjected to immunoblotting with antibody recognizing the hyperoxidized 2-cys Prxs (Prx-SO_2/SO_3) (AbFrontier, Korea). H_2O_2-treatred HeLa cell lysate was used as a positive control.

Fig. S3. Translocation of PrxII to nucleus by DNA damage.
HeLa cells were treated with ETO for indicated times and then immunostained for PrxII as described in *Experimental Procedures* . Nuclei were labeled with DAPI (blue). Data in the graph are means ± SD of the percent of nuclear immunoreactive fluorescence versus total fluorescence obtained from 25 ~ 35 cells . One representat ive set of two experiments is shown.

Lee *et al*. Fig. S1



Lee *et al*. Fig. S2



Lee *et al*. Fig. S3