Supplemental Figure 1. ATRIP translocation to sites of UV damage and Chk1 S345 phosphorylation are increased in S-phase cells. (A) Asynchronous (AS) XPA-complemented cells were synchronized with a double thymidine block (t = 0) and released. At the indicated times post-release, cells were UV treated and stained as in Figure 1A. Colocalization of ATRIP and CPD was determined as in Figure 1C. Error bars indicate standard error of three samples from a representative experiment (n = 3) performed in triplicate. Percentage of S-phase cells was determined by flow cytometry by measuring BrdU incorporation. (B) XPA-complemented cells were left asynchronous (AS) or synchronized in S phase (t = 4) as in (A), then mock-treated or exposed to 50 J/m^2 UV and allowed to recover for 1 hour. Equal amounts of cell lysate were resolved by SDS-PAGE and analyzed by western blot using the indicated antibodies.

Supplemental Figure 2. XPA is required for UV-induced Chk1 phosphorylation in XPA-deficient MEFs. NIH 3T3 cells or $XPA^{-/-}$ MEFs were mock treated or treated with 5, 15, or 50 J/m2 of UV. Cells were harvested after one hour and lysates were resolved by SDS-PAGE and analyzed by western blot using phospho-serine 345 Chk1, Chk1, and ATRIP antibodies. The S phase fraction was determined as described in Figure 1D.