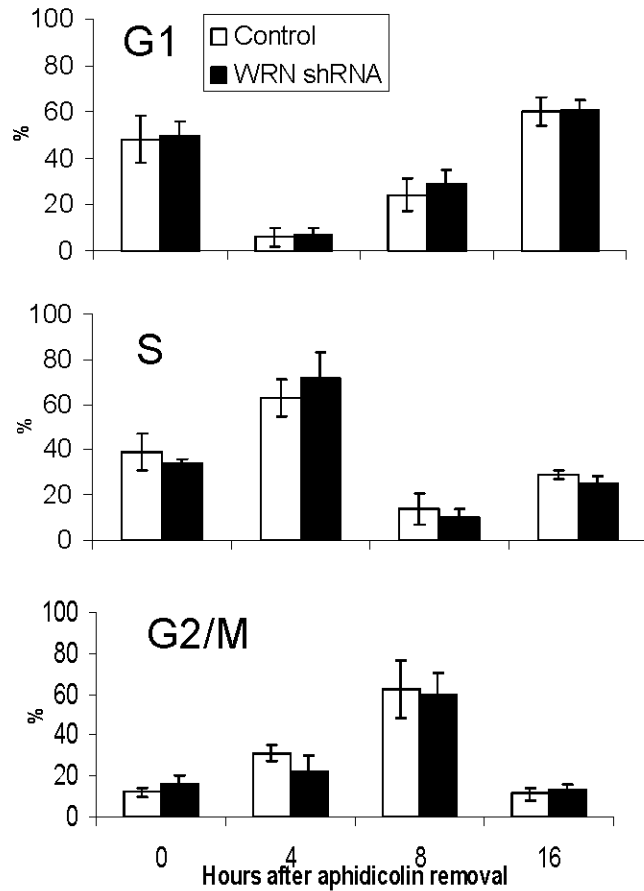
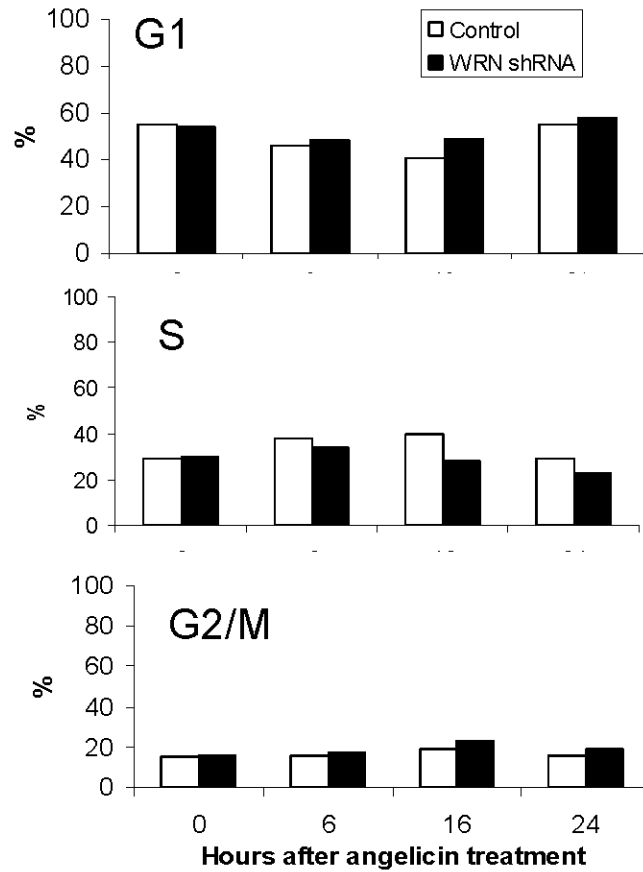


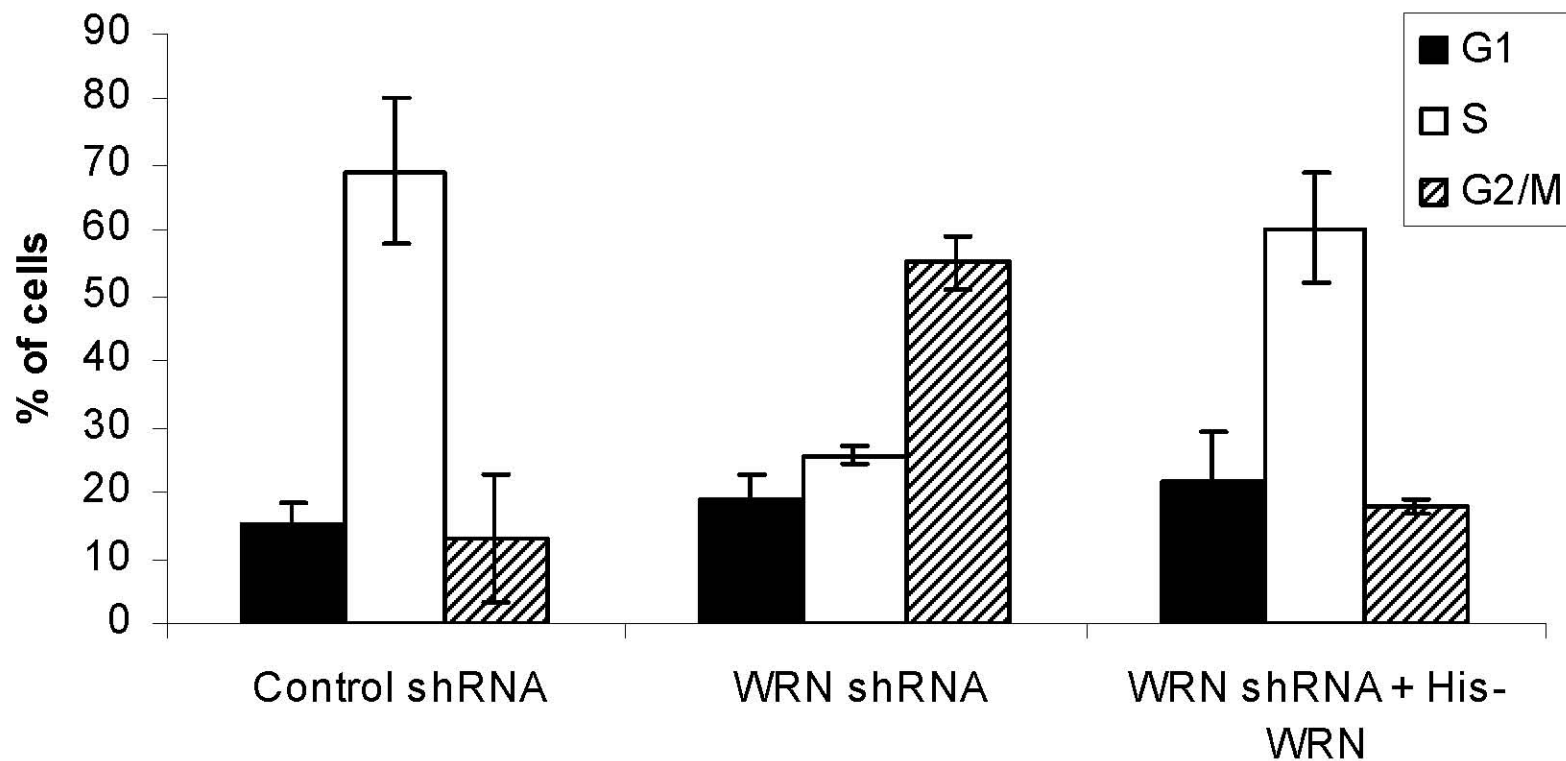
Quantification of cell cycle profiles shown in Fig. 1d. Control and WRN shRNA cells are collected 0, 6, 16, Or 48 h after cellular exposure to 6 Gy γ -irradiation for flow cytometric analysis.



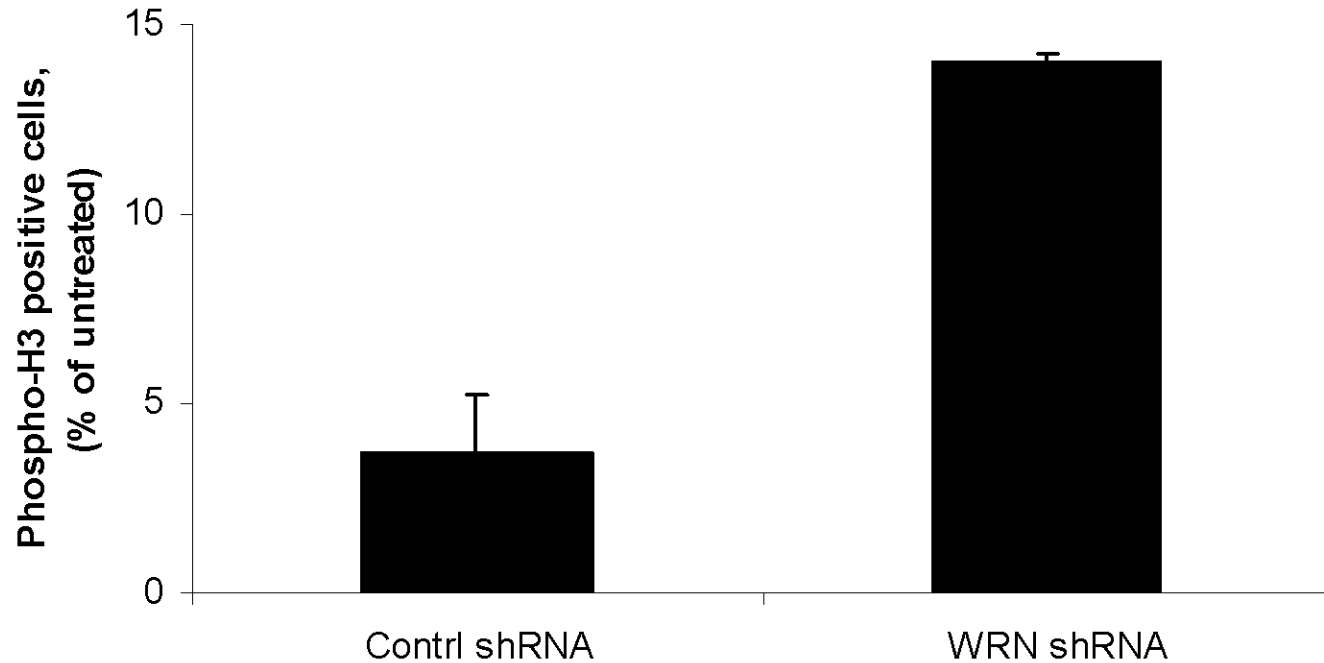
Quantification of cell cycle profiles shown in Fig. 1e. Control and WRN shRNA cells are collected 0, 4, 8, Or 16 h after aphidicolin removal (1 μ g/ml for 24 h) for flow cytometric analysis.



Quantification of cell cycle profiles shown in Fig. 1a. Control and WRN shRNA cells are collected 0, 6, 16, or 24 h after angelicin treatment (0.1 μ g/ml) for flow cytometric analysis.

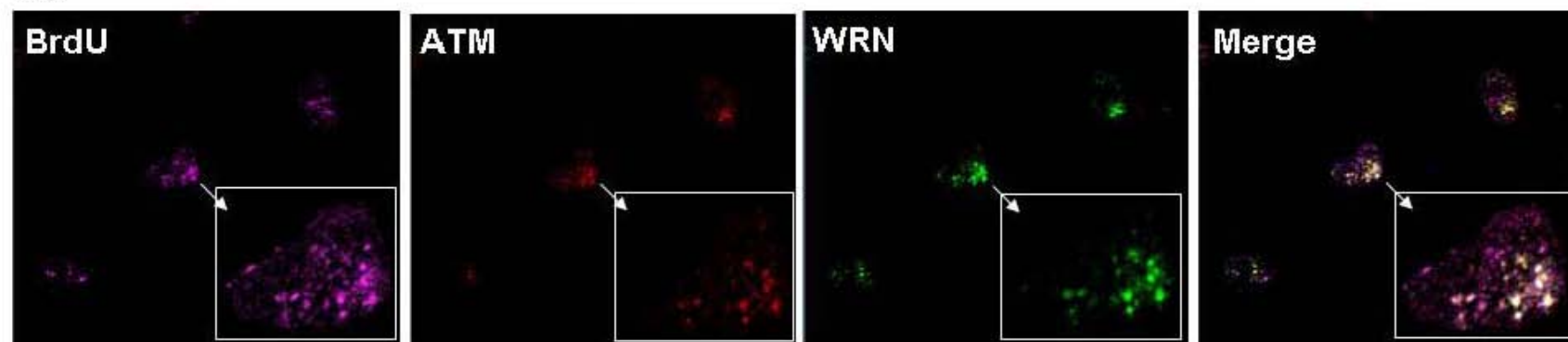
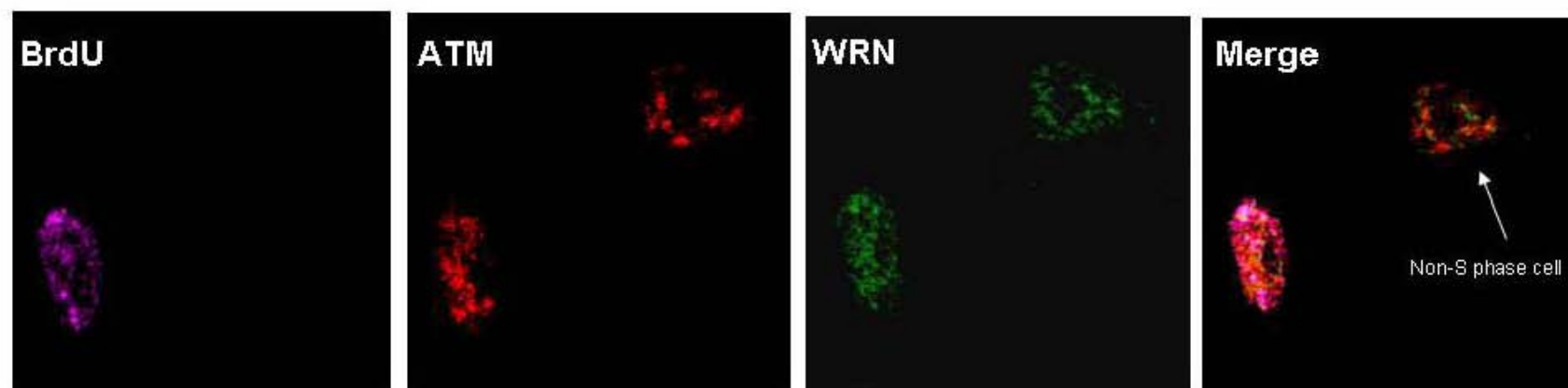


Control shRNA cells, WRN shRNA cells, and the WRN shRNA cells complemented with His-WRN using Polyfect reagent (Qiagen) were treated with PUVA (0.1 $\mu\text{g/ml}$), and cells were collected 24 h post-treatment for flow cytometric analysis.



WRN shRNA cells show increased mitotic entry after PUVA treatment.

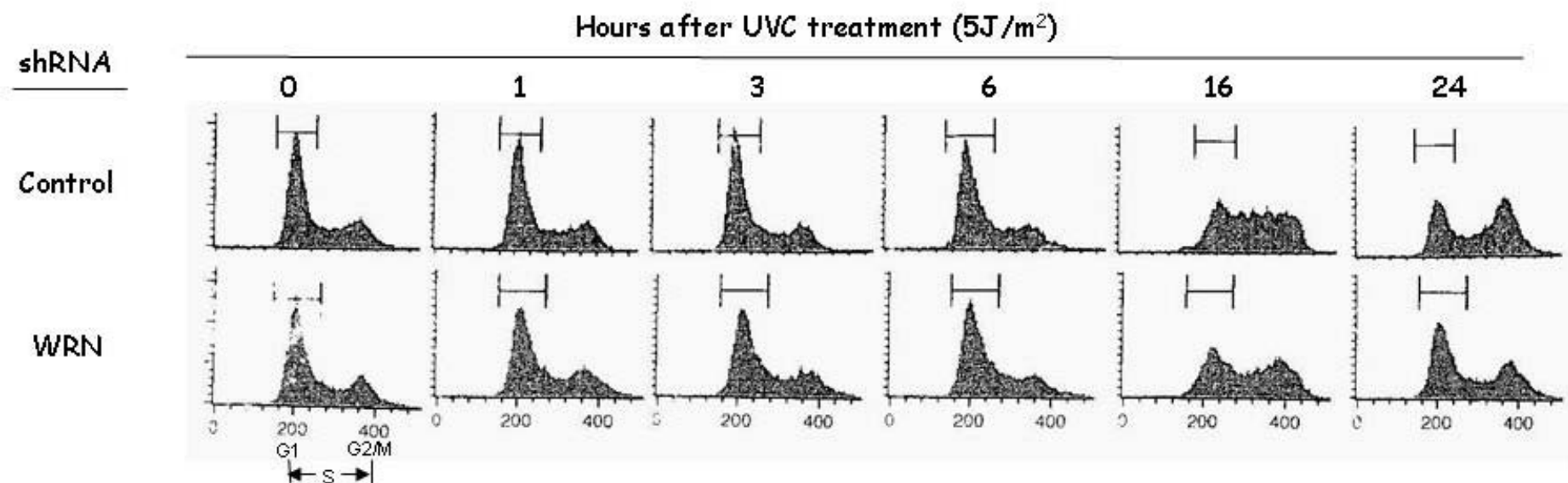
Control and WRN shRNA U-2 OS cells were treated with PUVA (0.1 μ g 8-methoxypsoralen/ml) and harvested after 12 h. The relative fraction of phospho-H3 positive cells was determined by flow cytometry. Values are expressed as a percentage of the unirradiated control (n = 3).

A**B**

ATM co-localizes with WRN at sites of DNA replication.

U-2 OS cells were pulse-labeled with BrdU for 0.5 h, fixed, and stained with rabbit antibodies against ATM (red), mouse antibodies against WRN (green), and sheep antibodies against BrdU (purple).

(A) shows unperturbed S phase and (B) shows non-S phase cells.



Cell cycle profiles in control and WRN shRNA U-2 OS cells treated with UV.

Cells were treated with UVC ($5\text{J}/\text{m}^2$, at a rate of $1\text{J}/\text{sec}$). Cells were harvested at the indicated time points and Analyzed by flow cytometry as described in Materials and Methods.