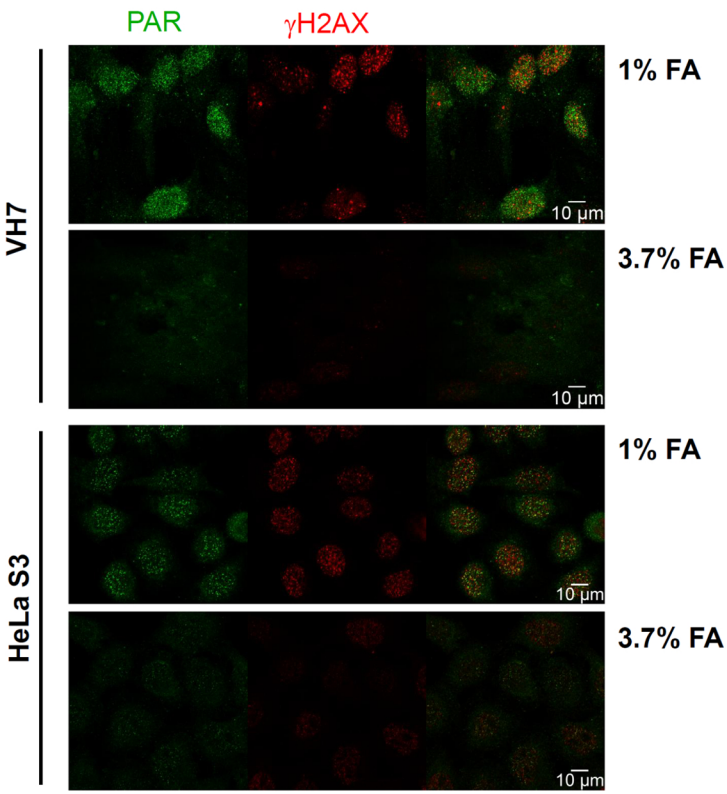
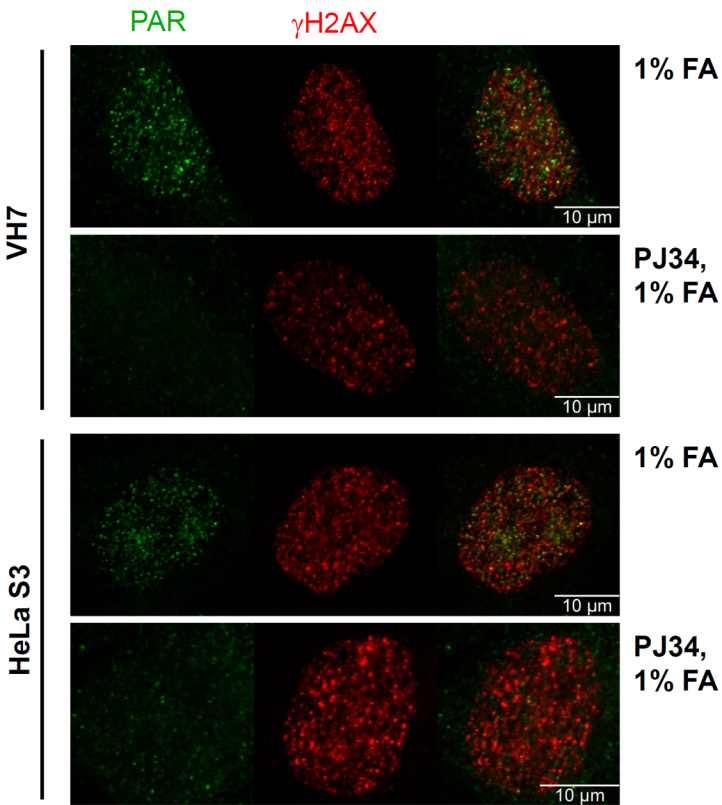


**Figure S1A:**

**PAR and  $\gamma$ H2AX staining in HeLa cells and human VH7 fibroblasts after JLI and BMB fixation**



**Figure S1B:**  
**PAR and  $\gamma$ H2AX staining in HeLa cells and human VH7 fibroblasts after JLI and JLI+PJ34 fixation**

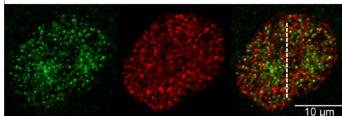


# Figure S1C: PAR and $\gamma$ H2AX are markers of DNA lesions of different quality

HeLa JLI

PAR

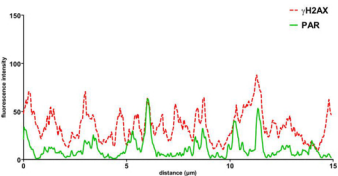
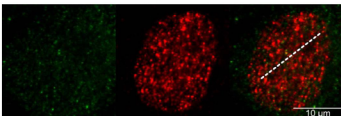
$\gamma$ H2AX



HeLa JLI + PJ34

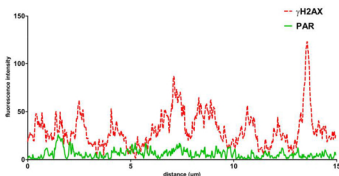
PAR

$\gamma$ H2AX



ImageJ – PSC colocalization  
Segmentation: raw data – whole nucleus

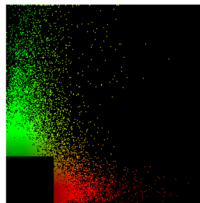
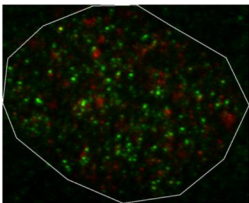
Pixels 137662  
Pearson's  $r = 0.04506745861002938$   
Spearman's  $r = 0.01649989621407877$   
Spearman's  $r$  (Ties) = 0.01508194732038942



ImageJ – PSC colocalization  
Segmentation: raw data – whole nucleus

Pixels 203112  
Pearson's  $r = -0.05933110245850771$   
Spearman's  $r = -0.018300500631740935$   
Spearman's  $r$  (Ties) = -0.032582525027772063

# Figure S1D: PAR and $\gamma$ H2AX are markers of DNA lesions of different quality



Pearson's r = -0.495  
Spearman's r = -0.535

