

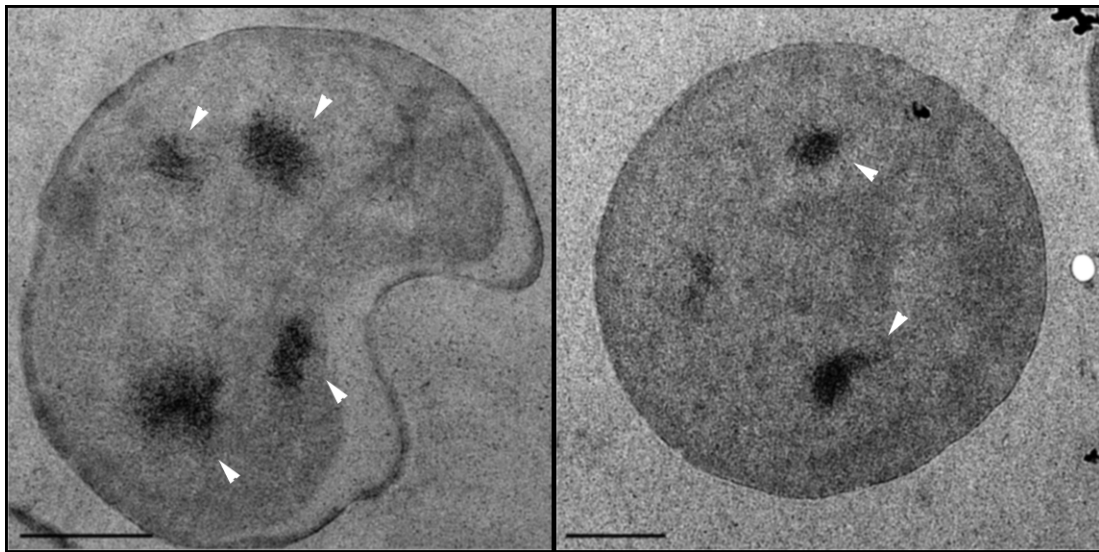
## Supplementary Information

**Fig. S1. Electron micrographs of *G.obscuriglobus* cells, stained for DNA, confirmed densely packed chromatin morphology.** Transmission electron micrographs of *G. obscuriglobus*, high-pressure frozen and freeze-substituted, were cut into thin sections and stained with the DNA-specific stain, osmium-amine B (see Materials and Methods section). Packed, confined DNA regions are visible (white arrowheads). Scale bars, 500 nm.

**Fig. S2. *G. obscuriglobus* tolerate high levels of UVC in comparison to w.t *E.coli*.** Actively growing cultures of w.t *E. coli* (AB1157) were irradiated with increasing doses of UV radiation using a germicidal UVC lamp. The results were plotted against the values achieved for *G. obscuriglobus* and the corresponding  $D_{10}$  values were calculated as in (21), and found to be 164.8 J/m<sup>2</sup> and 675. 8 J/m<sup>2</sup>, respectively .

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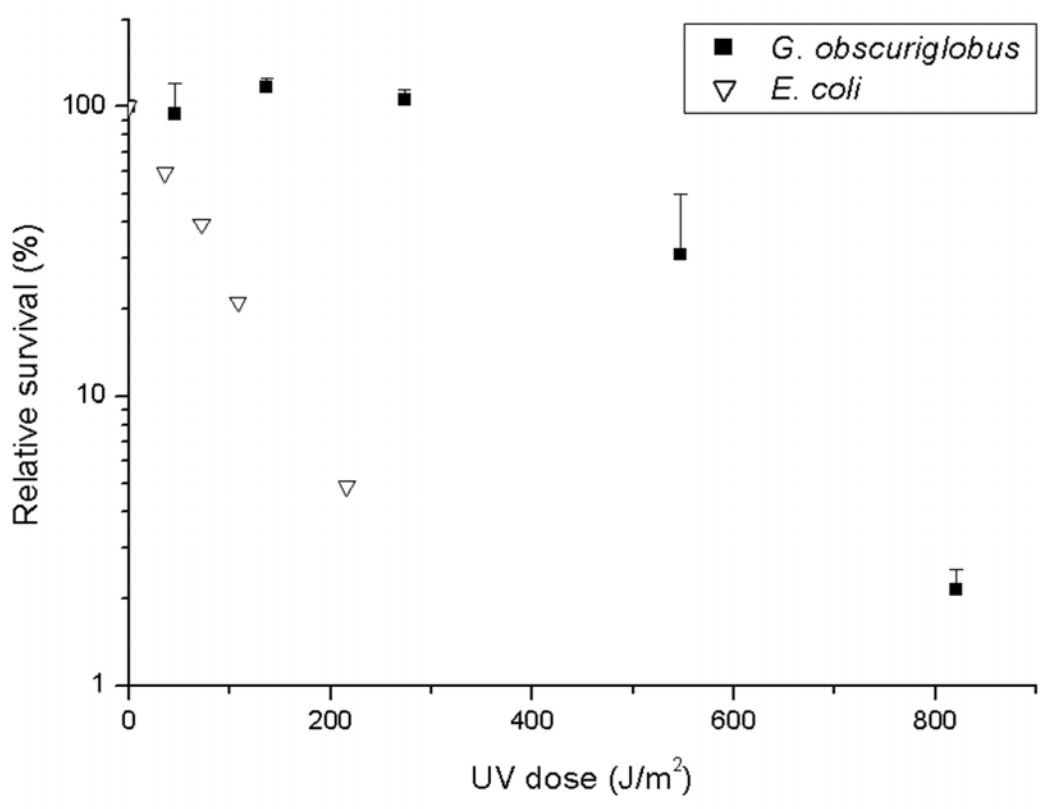
**Fig. S1**



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Fig. S2



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