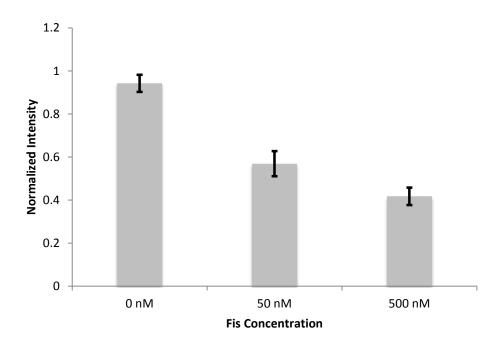
## Supplemental Material for "Facilitated dissociation of a nucleoid protein from the bacterial chromosome"

Nastaran Hadizadeh<sup>1\*</sup>, Reid C. Johnson<sup>2</sup>, John F. Marko<sup>1,3§</sup>



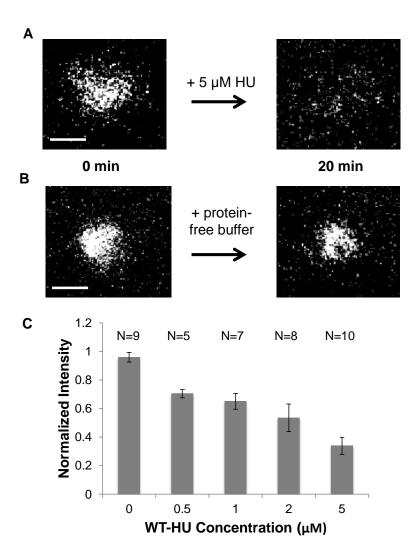
**Figure S1**. Dissociation of GFP-Fis from isolated nucleoids in 100 mM KGlu buffer. GFP-Fis labeled nucleoids were incubated in protein-free buffer, 50 nM Fis and 500 nM Fis for 20 minutes in experiments similar to those of Fig. 2 (main text), but using buffer containing 100 mM KGlu instead of 100 mM NaCl. A series of 4 experiments were carried out for each protein concentration; as Fis concentration was increased reduction of fluorescence following incubation was observed, similar to that observed with NaCl buffer as in Fig 2 (main text).

<sup>&</sup>lt;sup>1</sup>Department of Physics and Astronomy, Northwestern University, Evanston IL 60208-3118

<sup>&</sup>lt;sup>2</sup>Department of Biological Chemistry, David Geffen School of Medicine at UCLA, Los Angeles CA 90095-1737

<sup>&</sup>lt;sup>3</sup>Department of Molecular Biosciences, Northwestern University, Evanston IL 60208-3500

<sup>\*</sup>Present address: University of California, Davis, Department of Microbiology and Molecular Genetics, Davis CA 95616-8665



**Figure S2**. Dissociation of GFP-Fis from isolated nucleoids facilitated by *E. coli* HU. (A) GFP-Fis labeled isolated nucleoids were exposed to 5  $\mu$ M HU and (B) protein-free buffer, for 20 minutes; the nucleoids and proteins were in the 100 mM NaCl buffer used in similar experiments of Fig. 2 (main text); greater loss of GFP-Fis is observed when HU is present. Scale bars are 5  $\mu$ m. (C) Fluorescence intensity was measured after 20 minutes incubation of nucleoids with protein-free buffer, and with 0.5, 1, 2 and 5  $\mu$ M HU, showing little GFP-Fis dissociation for protein-free buffer and increased reduction of fluorescence with increased HU concentration.