Figure 3-Figure Supplement 1

=H2TH nuecleic acid binding element

E.coli_ribosomal_s13 HKHAVIALTS---LYGVGKTRSKAILAAAGIAEDVK
L.lactis_MutM TKKIKPYLLEQTLVAGLGNIYVDKVLWLAKIHPEKE
S.coelicolor_sIHF KMKVSALLES---LPGVGKVRAKQIMERLGISESRR
M.mazei_Topo6B RQKLAPFLRYS--FCKIGLLTAEEICKAAGLDPEID

Secondary structure α7 α8

δ+ helix dipole

residue specific nucleic acid interactions: aa = amide nitrogen; aa = side chain interaction; aa = carbonyl liganding Mg^{2+}/H_2O

ribosomal protein s13 | FpG/Endo VIII | sIHF | Topo6B

Sequence conservation

1 2 3 4 5 6 7 8 9

Variable → Conserved

electrostatic potential

- +