

# Aggregation tendencies in the p53 family are modulated by backbone hydrogen bonds

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Supplementary Table 1. Comparison of parameters from MD simulations<sup>a</sup>.

	p53	p63	p73	p53 R175H	p53 Ext
C $\alpha$ RMSD <sup>b</sup> (nm)	0.27 $\pm$ 0.01	0.22 $\pm$ 0.02	0.24 $\pm$ 0.01	0.27 $\pm$ 0.04	0.18 $\pm$ 0.02
Fraction native C $\alpha$ contacts <sup>c</sup>	0.60 $\pm$ 0.02	0.68 $\pm$ 0.02	0.69 $\pm$ 0.04	0.61 $\pm$ 0.03	0.78 $\pm$ 0.04
Secondary structure <sup>b,d</sup>	0.60 $\pm$ 0.03	0.57 $\pm$ 0.03	0.58 $\pm$ 0.03	0.60 $\pm$ 0.03	0.57 $\pm$ 0.03
Radius of gyration (nm)	1.64 $\pm$ 0.01	1.65 $\pm$ 0.01	1.66 $\pm$ 0.01	1.63 $\pm$ 0.01	1.63 $\pm$ 0.01
Number of C $\alpha$ -C $\alpha$ contacts within 1.0 nm <sup>b</sup>	8.4 $\pm$ 0.1	8.2 $\pm$ 0.1	8.2 $\pm$ 0.02	8.3 $\pm$ 0.004	8.4 $\pm$ 0.05
Intramolecular backbone hydrogen bonds <sup>b</sup>	0.41 $\pm$ 0.01	0.40 $\pm$ 0.002	0.41 $\pm$ 0.001	0.41 $\pm$ 0.001	0.39 $\pm$ 0.01
Total intramolecular hydrogen bonds <sup>b</sup>	0.74 $\pm$ 0.004	0.69 $\pm$ 0.01	0.70 $\pm$ 0.004	0.71 $\pm$ 0.01	0.73 $\pm$ 0.004
Protein-water hydrogen bonds <sup>b</sup>	2.2 $\pm$ 0.05	2.2 $\pm$ 0.05	2.2 $\pm$ 0.01	2.2 $\pm$ 0.004	2.1 $\pm$ 0.01

<sup>a</sup>Values reported correspond to avg.  $\pm$  s.d. between the two replicates.

<sup>b</sup>Values normalized per residue.

<sup>c</sup>C $\alpha$  deviations <0.15 nm from the initial structure were classified as native contacts.

<sup>d</sup>Sum of residues in  $\alpha$ -helix,  $\beta$ -sheet,  $\beta$ -bridge, and turn conformations, as classified by DSSP.