

## SUPPLEMENTARY MATERIAL

**Table S1.** Proton, carbon and phosphorus assignments<sup>a</sup> for GCN4 cognate DNA

Residue	H1'	H2'	H2''	H3'	H4'	H5'	H5''	H6/H8	H2/H5/Me	C8/C6	C2/C5/CMe	C1'	C2'	C3'	C4'	P
C1	5.76	2.00	2.44	4.73	4.07	4.17	7.71	5.97	143.00	98.80	84.20	40.70	76.48	87.72	-4.10	
A2	6.32	2.79	2.96	5.05	4.44	4.27	8.41	7.84	141.60	154.40	84.24	40.50	80.18	87.17	-4.54	
						4.16										
T3	5.72	1.94	2.34	4.87	4.18	4.07	7.14	1.46	137.80	14.37	84.89	39.50	76.62	84.82	-4.18	
						4.27										
G4	5.55	2.67	2.77	5.02	4.36	4.17	7.84	-	137.80	-	83.92	40.73	79.52	86.42	-4.17	
						4.07										
A5	6.22	2.65	2.88	5.04	4.46	4.22	8.14	7.74	140.60	154.70	84.14	41.42	79.70	87.12	-4.35	
						4.14										
C6	5.60	2.00	2.35	4.80	4.15	4.23	7.19	5.20	141.39	97.63	84.40	40.38	76.88	84.67	-4.06	
G7	5.96	2.57	2.77	4.92	4.36	4.21	7.76	-	137.80	-	84.15	41.35	79.48	86.42	-4.52	
						4.14										
T8	6.01	2.11	2.50	4.88	4.23	4.13	7.24	1.35	138.00	14.38	84.31	39.75	77.40	85.32	-4.34	
C9	5.60	2.11	2.43	4.87	4.15	4.23	7.56	5.69	143.42	97.96	84.50	39.95	78.12	84.67	-4.00	
A10	6.26	2.71	2.91	5.04	4.43	4.26	8.34	7.68	141.40	154.50	84.22	40.90	79.70	86.82	-4.45	
						4.13										
T11	5.84	1.88	2.32	4.85	4.15	4.26	7.14	1.54	137.80	14.42	84.15	39.50	76.62	85.02	-4.13	
G12	6.16	2.59	2.38	4.69	4.19	4.08	7.90	-	138.50	-	84.10	42.25	78.06	87.23	-	

<sup>a</sup>Proton chemical shifts are referenced with respect to TSP [sodium 3-trimethylsilyl-(2,2,3,3-<sup>2</sup>H<sub>4</sub>) propionate], carbon indirectly referenced with respect to DSS [2,2-dimethyl-2-silapentane-5-sulfonic acid] and phosphorus with respect to TMP [trimethylphosphate].