

Table S5 Original values of the ten physicochemical properties for the 16 different

Property Name	Shift	Slide	Rise	Tilt	Roll	Twist	Enthalpy
AA/TT	-0.08	-1.27	3.18	-0.8	7	31	-6.6
AC/GT	0.23	-1.43	3.24	0.8	4.8	32	-10.2
AG/CT	-0.04	-1.5	3.3	0.5	8.5	30	-7.6
AT	-0.06	-1.36	3.24	1.1	7.1	33	-5.7
CA	0.11	-1.46	3.09	1	9.9	31	-10.5
CC	-0.01	-1.78	3.32	0.3	8.7	32	-12.2
CG	0.3	-1.89	3.3	-0.1	12.1	27	-8
GA	0.07	-1.7	3.38	1.3	9.4	32	-13.3
GC	0.07	-1.39	3.22	0	6.1	35	-14.2
GG	-0.01	-1.78	3.32	0.3	12.1	32	-12.2
TA	-0.02	-1.45	3.26	-0.2	10.7	32	-8.1
TC	0.07	-1.7	3.38	1.3	9.4	32	-10.2
TG	0.11	-1.46	3.09	1	9.9	31	-7.6

t dinucleotides in RNA

Entropy	Free energy	GC content
-18.4	-0.9	0
-26.2	-2.1	1
-19.2	-1.7	1
-15.5	-0.9	0
-27.8	-1.8	1
-29.7	-2.9	2
-19.4	-2	2
-35.5	-2.3	1
-34.9	-3.4	2
-29.7	-2.9	2
-22.6	-1.1	0
-26.2	-2.1	1
-19.2	-1.7	1