

Table S1. Nucleot(s)ides, their symbols, and one-letter codes

Nucleotide derivatives	Name	Symbol	One letter code
Adenosines	adenosine	A	A
	unknown modified adenosine	?A	H
	1-methyladenosine	m1A	"
	2-methyladenosine	m2A	/
	N6-isopentenyladenosine	i6A	+
	2-methylthio-N6-isopentenyladenosine	ms2i6A	*
	N6-methyladenosine	m6A	=
	N6-threonylcarbamoyladenosine	t6A	6
	N6-methyl-N6-threonylcarbamoyladenosine	m6t6A	E
	2-methylthio-N6-threonylcarbamoyladenosine	ms2t6A	[
	2'-O-methyladenosine	Am	:
	2'-O-ribosyladenosine (phosphat)	Ar(p)	^
	N6-(cis-hydroxyisopentenyl)adenosine	io6A	`
Cytidines	cytidine	C	C
	unknown modified cytidine	?C	<
	2-thiocytidine	s2C	%
	2'-O-methylcytidine	Cm	B
	N4-acetylcytidine	ac4C	M
	5-methylcytidine	m5C	?
	3-methylcytidine	m3C	'
	Lysidine	k2C	}
	5-formylcytidin	f5C	>
	2-O-methyl-5-formylcytidin	f5Cm	°
Guanosines	Guanosine	G	G
	unknown modified guanosine	?G	;

	1-methylguanosine	m1G	K
	N2-methylguanosine	m2G	L
	2'-O-methylguanosine	Gm	#
	N2,N2-dimethylguanosine	m22G	R
	N2,N2,2'-O-trimethylguanosine	m22Gm	
	7-methylguanosine	m7G	7
	Archaeosine	fa7d7G	(
	queuosine	Q	Q
	mannosyl-queuosine	manQ	8
	galactosyl-queuosine	galq	9
Uridines	Uridine	U	U
	unknown modified uridine	?U	N
	5-methylaminomethyluridine	mnm5U	{
	2-thiouridine	s2U	2
	2'-O-methyluridine	Um	J
	4-thiouridine	s4U	4
	5-carbamoylmethyluridine	ncm5U	&
	5-methoxycarbonylmethyluridine	mcm5U	l
	5-methylaminomethyl-2-thiouridine	mnm5s2U	S
	5-methoxycarbonylmethyl-2-thiouridine	mcm5s2U	3
	5-methoxyuridine	cmo5U	V
	5-carboxymethylaminomethyluridine	cmn5U	!
	5-carboxymethylaminomethyl-2-thiouridine	cmnm5s2U	\$
	3-(3-amino-3-carboxypropyl)uridine	acp3U	X
	5-(carboxyhydroxymethyl)uridinemethyl ester	mchm5U	,
	5-carboxymethylaminomethyl-2'-O-methyluridine	cmnm5Um)
	5-carbamoylmethyl-2'-O-methyluridine	ncm5Um	~
	dihydrouridine	D	D
	pseudouridine	psi	P

	1-methylpseudouridine	m1psi]
	2'-O-methylpseudouridine	psi m	Z
	5-methyl-2-thiouridine	m5s2U	F
	2'-O-dimethyluridine	m5Um	\
Thymines	thymine	T	T
	ribosylthymine	m5U	T
Inosines	inosine	I	I
	1-methylinosine	m1I	O
Wybutosines	wybutosine	yW	Y
	peroxywybutosine	o2yW	W
Other	empty position		-
	insertion		—
	unknown nucleotide		.

Table S2. Parameters of the Simple Logistic model

Class	Predictor function f_i			
Ala	-7.21	+		
	[3=G]	*	1.41	+
	[17=D]	*	1.32	+
	[35=G]	*	5.99	+
	[36=C]	*	3.13	+
	[70=U]	*	1.78	+
	[71=C]	*	1.41	
Arg	-7.59	+		
	[21=A]	*	1.64	+
	[35=C]	*	6.66	+
	[36=G]	*	7.2	
Asn	-2.79	+		
	[5=C]	*	1.67	+
	[14=U]	*	3.15	+
	[35=U]	*	2.3	+
	[37=6]	*	2.18	+
	[39=C]	*	1.41	+
	[41=G]	*	2.09	+
	[63=C]	*	-1.74	+
	[73=A]	*	-1.66	
Asp	-5.07	+		

	[34=8] *	3.13	+
	[34=G] *	3.47	+
	[34=Q] *	2.83	+
	[35=U] *	2.48	+
	[36=C] *	3.91	+
	[73=G] *	1.05	
Cys	-7.46	+	
	[9=G] *	1.49	+
	[34=G] *	3.87	+
	[35=C] *	2.63	+
	[36=A] *	1.49	+
	[63=G] *	1.83	+
	[73=U] *	4.04	
Gln	-1.44	+	
	[1=G] *	-1.41	+
	[35=U] *	2.53	+
	[36=G] *	2.69	+
	[41=C] *	1.57	+
	[44=A] *	-1.2	+
	[58=A] *	-1.62	+
	[70=A] *	1.62	+
	[71=C] *	1.74	
Glu	-5.83	+	
	[12=C] *	2.41	+
	[16=A] *	1.79	+
	[24=A] *	1.6	+
	[35=U] *	2.44	+
	[36=C] *	4	+
	[39=C] *	1.74	+
	[50=A] *	2.17	
Gly	-8.11	+	
	[35=C] *	7.22	+
	[36=C] *	7.98	
His	-5.43	+	
	[-1=G] *	8.34	+
	[2=C] *	1.48	+
	[17=U] *	2.41	+
	[35=U] *	1.67	+
	[36=G] *	2.3	+
	[37=G] *	2.96	
Ile	-3.44	+	
	[2=G] *	1.3	+
	[7=G] *	-2.05	+
	[35=A] *	1.92	+
	[36=U] *	2.61	+
	[37=6] *	1.3	+
	[40=G] *	1.89	+
	[41=G] *	2.01	+
	[70=G] *	-1.39	

Leu	-3.88 + [35=A] * 3.27 + [36=G] * 7.78 + [48=-] * -3.25 + [55=G] * 3.14
Lys1b	-3.37 + [4=C] * 1.32 + [18=-] * -3.46 + [28=C] * 1.38 + [35=U] * 2.35 + [36=U] * 1.59 + [43=G] * -1.4 + [71=C] * 1.69
Lys2b	-2.58 + [7=G] * -1.6 + [29=U] * 1.13 + [34=)] * 2.2 + [34=G] * -1.43 + [35=U] * 2.39 + [36=U] * 3.41 + [67=G] * -1.51
Met	-4.21 + [7=G] * 1.64 + [11=G] * 2.19 + [31=P] * 2.7 + [34=B] * 1.59 + [34=C] * 2.3 + [34=M] * 2.85 + [35=A] * 2.08 + [36=U] * 2.52
Phe	-6.4 + [21=G] * 2.89 + [23=A] * 2.29 + [34=#] * 1.37 + [34=G] * 1.55 + [35=A] * 1.97 + [36=A] * 4.29 + [44=G] * 1.27
Pro	-7.72 + [35=G] * 7.61 + [36=G] * 6.49 + [37=K] * 1.39
Ser	-5.25 + [25=A] * 2.2 + [35=G] * 6.72 + [36=A] * 3.5 + [48=-] * -1.97 + [73=G] * 3.49
Thr	-7.36 + [2=C] * 1.45 + [35=G] * 7.57 +

	[36=U] *	4.59	+
	[73=U] *	1.43	
Trp	-4.87	+	
	[22=G] *	1.52	+
	[34=B] *	1.41	+
	[35=C] *	4.02	+
	[36=A] *	2.78	+
	[70=C] *	1.2	+
	[72=U] *	1.76	+
	[73=U] *	-1.48	
Tyr	-5.65	+	
	[21=C] *	1.66	+
	[34=G] *	1.88	+
	[35=U] *	4.12	+
	[36=A] *	3.83	+
	[45=-] *	2.42	+
	[63=C] *	-1.66	
Val	-8.13	+	
	[35=A] *	7.22	+
	[36=C] *	7.6	
Arg2	-6.9	+	
	[21=A] *	2.81	+
	[35=C] *	4.64	+
	[36=U] *	3.81	+
	[69=G] *	1.44	+
	[72=U] *	2.16	
Leu2	-1.69	+	
	[12=A] *	2.15	+
	[13=C] *	-1.35	+
	[35=A] *	3.81	+
	[36=A] *	3.4	+
	[48=-] *	-4.12	
Ser2	-1.89	+	
	[20=-] *	1.69	+
	[34=7] *	3.3	+
	[34=G] *	1.57	+
	[35=C] *	3.9	+
	[36=U] *	2.85	+
	[46=-] *	-4.35	