

One-letter codes for modified ribonucleotides

tRNAdb code	symbol	name	MODOMICS		
			code	number	unmodified
"	m1A	1-methyladenosine	ᄁ	83	A
K	m1G	1-methylguanosine	K	22	G
O	m1I	1-methylinosine	O	26	A
J	m1Y	1-methylpseudouridine	J	88	U
:	Am	2'-O-methyladenosine	ᄡ	127	A
B	Cm	2'-O-methylcytidine	B	84	C
#	Gm	2'-O-methylguanosine	#	28	G
Z	Ym	2'-O-methylpseudouridine	Z	103	U
J	Um	2'-O-methyluridine	J	50	U
}	k2C	2-lysidine	}	101	C
/	m2A	2-methyladenosine	ᄢ	37	A
≠	ms2io6A	2-methylthio-N6-(cis-hydroxyisopentenyl) adenosine	≠	126	A
*	ms2i6A	2-methylthio-N6-isopentenyladenosine	*	51	A
[	ms2t6A	2-methylthio-N6-threonylcarbamoyladenosine	[	55	A
%	s2C	2-thiocytidine	ᄤ	92	C
2	s2U	2-thiouridine	2	100	U
X	acp3U	3-(3-amino-3-carboxypropyl)uridine	X	75	U
'	m3C	3-methylcytidine	ᄥ	52	C
4	s4U	4-thiouridine	4	7	U
\	m5Um	5,2'-O-dimethyluridine	ᄦ	122	U
,	mchm5U	5-(carboxyhydroxymethyl)uridine methyl ester	ᄧ	85	U
&	ncm5U	5-carbamoylmethyluridine	&	43	U
)	cmnm5Um	5-carboxymethylaminomethyl-2'-O-methyluridine	)	23	U
\$	cmnm5s2U	5-carboxymethylaminomethyl-2-thiouridine	\$	45	U
!	cmnm5U	5-carboxymethylaminomethyluridine	!	87	U
°	f5Cm	5-formyl-2'-O-methylcytidine	°	104	C
3	mcm5s2U	5-methoxycarbonylmethyl-2-thiouridine	3	68	U
1	mcm5U	5-methoxycarbonylmethyluridine	1	27	U
5	mo5U	5-methoxyuridine	5	74	U
F	m5s2U	5-methyl-2-thiouridine	F	3	U

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S	mnm5s2U	5-methylaminomethyl-2-thiouridine	S	110	U
{	mnm5U	5-methylaminomethyluridine	{	129	U
?	m5C	5-methylcytidine	?	18	C
T	m5U	5-methyluridine	T	12	U
∃	tm5s2U	5-taurinomethyl-2-thiouridine	h	91	U
Ê	tm5U	5-taurinomethyluridine	h	21	U
7	m7G	7-methylguanosine	7	116	G
	m2,2Gm	N2,N2,2'-O-trimethylguanosine		40	G
R	m2,2G	N2,N2-dimethylguanosine	R	13	G
L	m2G	N2-methylguanosine	L	36	G
M	ac4C	N4-acetylcytidine	M	81	C
+	i6A	N6-isopentenyladenosine	4	56	A
E	m6t6A	N6-methyl-N6-threonylcarbamoyladenosine	E	16	A
=	m6A	N6-methyladenosine	Ж	96	A
6	t6A	N6-threonylcarbamoyladenosine	6	130	A
.	N	any ribonucleoside residue	.	140	.
(	G+	archaeosine	(	99	G
D	D	dihydrouridine	D	14	U
9	galQ	galactosyl-queuosine	9	86	G
♀	gluQ	glutamyl-queuosine	♀	42	G
I	I	inosine	I	113	A
8	manQ	mannosyl-queuosine	8	90	G
W	o2yW	peroxywybutosine	W	121	G
P	Y	pseudouridine	P	118	U
Q	Q	queuosine	Q	65	G
@	xX	unknown modification	ž	98	.
H	xA	unknown modified adenosine	H	72	A
<	xC	unknown modified cytidine	V	70	C
;	xG	unknown modified guanosine	ƒ	66	G
N	xU	unknown modified uridine	N	76	U
V	cmo5U	uridine 5-oxyacetic acid	V	47	U
Y	yW	wybutosine	Y	30	G
^	Ar(p)	2'-O-ribosyladenosine (phosphate)	frj	20	A

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ᵀ	Gr(p)	2'-O-ribosylguanosine (phosphate)	ᵀ	34	G
e	pA2'3'cp	adenosine-5'-phosphate-2',3'-cyclic phosphate	ᵑ	215	A
γ	pyyW	wybutosine[C15(S)]-5'-monophosphate	Υ	244	G
ã	12A	2-METHYLTHIO-N6-(AMINOCARBONYL-L-THREONYL)-ADENOSINE-5'-MONOPHOSPHATE	NA	NA	A
"	1MA	6-HYDRO-1-METHYLADENOSINE-5'-MONOPHOSPHATE	ᵔ	83	A
⚡	1RN	(E)-N-{{[4-oxo-1-(5-O-phosphono-beta-D-arabinofuranosyl)-2-thioxo-1,2,3,4-tetrahydropyrimidin-5-yl]methylidene}glycine	倪	307	.
ũ	3AU	3-[(3S)-3-amino-3-carboxypropyl]uridine 5'-(dihydrogen phosphate)	NA	NA	U
λ	4OC	4N,O2'-METHYLCYTIDINE-5'-MONOPHOSPHATE	λ	208	C
ı	7S3	1-methyl inosinic acid	NA	NA	.
ã	8AN	3'-amino-3'-deoxyadenosine 5'-(dihydrogen phosphate)	𐄂	271	A
ũ	A1I9V	5-METHYL-2-THIO-URIDINE-5'-MONOPHOSPHATE	F	399	U
ù	A1L3O	5-Hydroxyuridine 5'-phosphate	α	360	U
ŵ	A1L4U	5-methoxycarbonylmethyl-2-deoxouridine	NA	NA	U
Ŵ	A1LZ3	methyl dihydrogen phosphite	NA	NA	.
ı	AG9	AGMATIDINE	ı	141	C
y	B8H	[(2~{R},3~{S},4~{R},5~{S})-5-[1-methyl-2,4-bis(oxidanylidene)pyrimidin-5-yl]-3,4-bis(oxidanyl)oxolan-2-yl]methyl dihydrogen phosphate	俊	258	.
ȳ	C4J	(5S)-5-{3-[(3S)-3-amino-3-carboxypropyl]-1-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrimidin-5-yl}-2,5-anhydro-1-O-phosphono-L-arabinitol	侮	260	.
⌘	F3N	3'-deoxy-3'-(L-phenylalanylamino)adenosine 5'-(dihydrogen phosphate)	NA	NA	A
á	L3X	3'-deoxy-3'-(glycylamino)adenosine 5'-(dihydrogen phosphate)	NA	NA	A
e	MKX	cyclic N6-threonylcarbamoyladeniosine 5'-monophosphate	e	413	A
ġ	QUO	2-AMINO-7-DEAZA-(2'',3''-DIHYDROXY-CYCLOPENTYLAMINO)-GUANOSINE-5'-MONOPHOSPHATE	NA	NA	G
æ	ZJS	N-(3-methylbut-2-en-1-yl)adenosine 5'-(dihydrogen phosphate)	NA	NA	A
>	f5C	5-formylcytidin	>	31	C
`	io6A	N6-(cis-hydroxyisopentenyl)adenosine	᠖	10	A
~	ncm5Um	5-carbamoylmethyl-2'-O-methyluridine	~	29	U