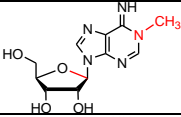
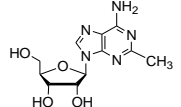
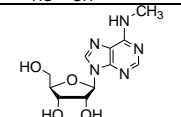
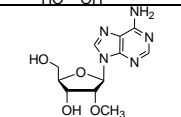
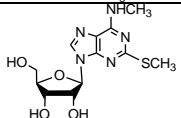
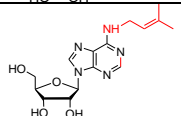
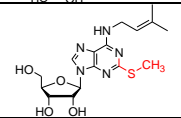
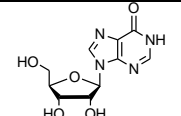
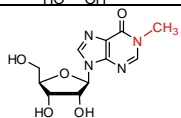
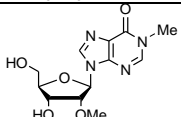
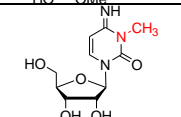
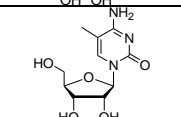
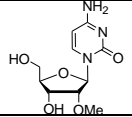
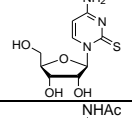
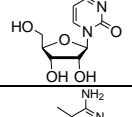
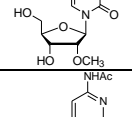
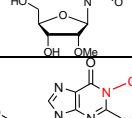
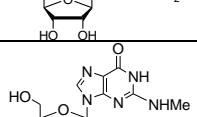
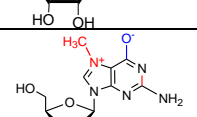
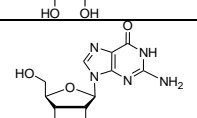
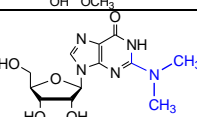
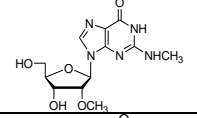
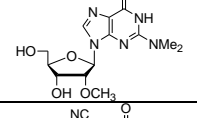
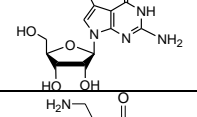
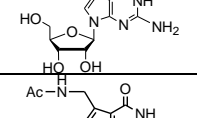
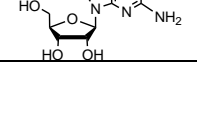

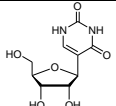
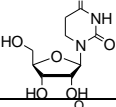
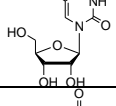
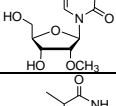
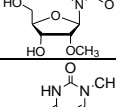
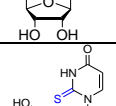
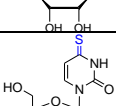
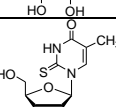
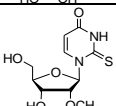
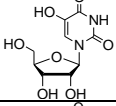
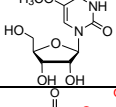
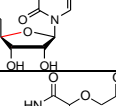
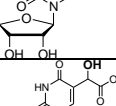
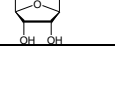



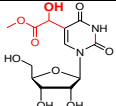
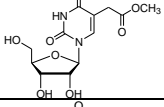
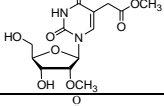
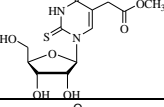
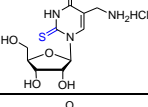
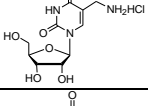
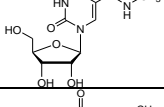
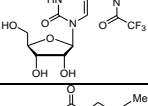
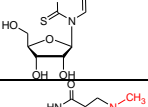
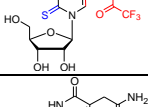
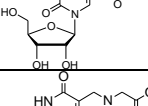
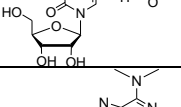
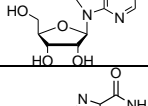
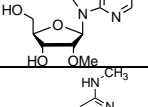
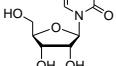
Naturally-Occurring RNA-Modified Nucleosides

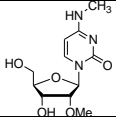
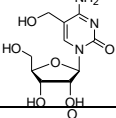
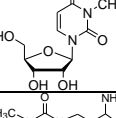
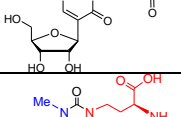
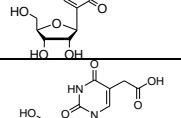
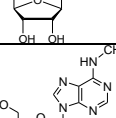
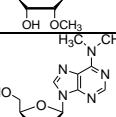
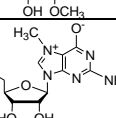
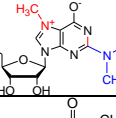
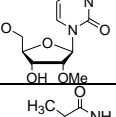
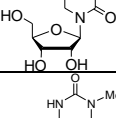
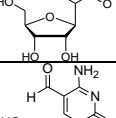
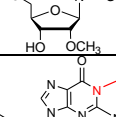
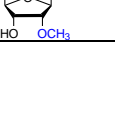

Researchers discovered 120-150 naturally-occurring modified nucleosides generated during the modification processes of various natural RNAs. Several of these naturally modified ribonucleosides are common nucleosides while most of them are not readily available. Granlen has more than 80% these compounds and hundreds of their closely related analogues in stock. Our skilled teams are capable of making more based on your need.

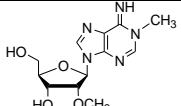
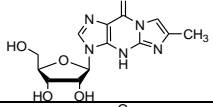
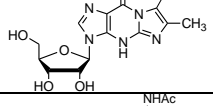
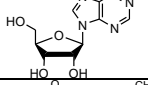
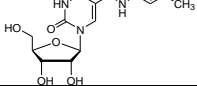
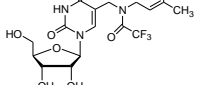
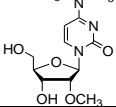
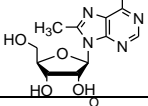
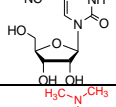
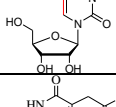
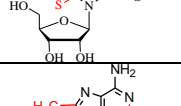
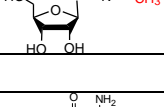
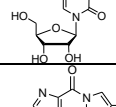
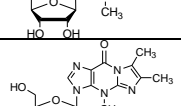
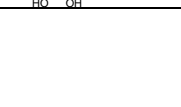
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2	m ² A	GL100877 CAS#16526-56-0 2-Methyladenosine	
3	m ⁶ A	GL100832 CAS#1867-73-8 N ⁶ -Methyladenosine	
4	Am	GL100400 CAS#2140-79-6 2'-O-Methyl adenosine	
5	ms ² m ⁶ A	GL100908 CAS#13406-51-4 N ⁶ -Methyl-2-methylthioadenosine	
6	i ⁶ A	GL102581 CAS#7724-76-7 N ⁶ -Isopentenyladenosine	
7	ms2i6A	GL103339 CAS#20859-00-1 2-Methylthio-N ⁶ -iso-pentenyladenosine	
17	I	GL100160 CAS#58-63-9 Inosine	
18	m ¹ I	GL102666 CAS#2140-73-0 N1-Methylinosine	
19	m ¹ Im	GL103885 1,2'-O-Dimethylinosine 65150-69-8	
20	m ³ C	GL102216 CAS#2140-64-9 N ³ -Methylcytidine	
21	m ⁵ C	GL100387 CAS#2140-61-6 5-Methylcytidine	

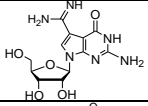
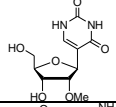
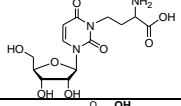
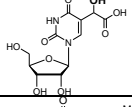
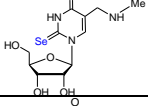
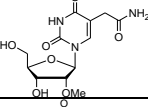
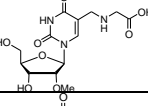
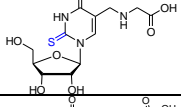
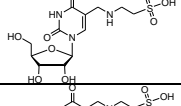
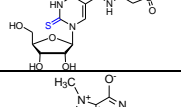
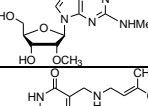
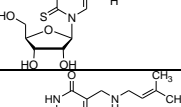
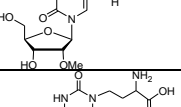
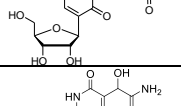
22	Cm	GL100256 CAS# 2140-72-9 2'- <i>O</i> -Methyl cytidine	
23	s ² C	GL102938 CAS#13239-97-9 2-thiocytidine	
24	ac ⁴ C	GL100118 CAS#3768-18-1 <i>N</i> ⁴ -Acetyl cytidine	
26	m ⁵ Cm	GL100726 CAS#113886-70-7 2'- <i>O</i> -Methyl-5-methylcytidine	
27	ac ⁴ Cm	GL100163 CAS#113886-71-8 <i>N</i> ⁴ -acetyl-2'- <i>O</i> -methylcytidine	
29	m ¹ G	GL102690 CAS#2140-65-0 <i>N</i> ¹ -Methylguanosine	
30	m ² G	GL100901 CAS#2140-77-4 <i>N</i> ² -Methylguanosine	
31	m ⁷ G	GL102306 CAS#20244-86-4 <i>N</i> ⁷ -Methylguanosine	
32	Gm	GL101169 CAS#2140-71-8 2'- <i>O</i> -Methylguanosine	
33	m ² ₂ G	GL102166 CAS#2140-67-2 <i>N</i> ² , <i>N</i> ² -Dimethylguanosine	
34	m ² Gm	GL100731 CAS#135023-21-1 2'- <i>O</i> -Methyl- <i>N</i> ² -methylguanosine	
35	m ² ₂ Gm	GL100732 CAS#113886-73-0 2'- <i>O</i> -Methyl- <i>N</i> ² , <i>N</i> ² -dimethyl-guanosine	
47	preQ0	GL100964 CAS#61210-21-7 7-Cyano-7-deaza guanosine, Pre-Q ₀	
48	preQ1	7-Aminomethyl-7-deazaguanosine 66048-70-2	
		GL100963 7-(<i>N</i> -Acetylaminomethyl)-7-deazaguanosine Ac-pre-Q ₁	

50	Ψ	GL100196 CAS#1445-07-4 Pseudouridine	
51	D	GL101870 CAS#5627-05-4 5,6-Dihydrouridine	
52	m ⁵ U	GL100159 CAS#1463-10-1 5-methyluridine	
53	Um	GL100170 CAS#2140-76-3 2'-O-Methyl uridine	
54	m ⁵ Um	GL100423 CAS#55486-09-4 2'-O-Methyl-5-methyluridine	
55	m ¹ Ψ	GL101336 CAS#13860-38-3 <i>N</i> ¹ -Methyl pseudouridine	
57	s ² U	GL100351 CAS#20235-78-3 2-Thiouridine	
58	s ⁴ U	GL101285 CAS#13957-31-8 4-thiouridine	
59	m ⁵ s ² U	GL102160 CAS#32738-09-3 5-Methyl-2-thiouridine	
60	s ² Um	GL100739 CAS#113886-72-9 2'-O-Methyl-2-thiouridine	
62	ho ⁵ U	GL100340 CAS#957-77-7 5-Hydroxyuridine	
63	mo ⁵ U	GL100725 CAS#35542-01-9 5-Methoxyuridine	
64	cmo ⁵ U	GL102693 CAS#28144-25-4 Uridine 5-oxyacetic acid	
65	mcmo ⁵ U	GL100347 CAS#66536-81-0 Uridine 5-oxyacetic acid methyl ester	
67	mchm ⁵ U	5-(Carboxyhydroxymethyl)uridine methyl ester; 89665-83-8	

	mchm ⁵ U	GL100715 CAS#945684-13-9 5-(1-Hydroxy)(methoxycarbonyl)methyl uridine	
68	mcm ⁵ U	GL100361 CAS#29428-50-0 5-(Methoxycarbonyl) methyluridine	
69	mcm ⁵ Um	GL100362 CAS#60197-31-1 5-(Methoxy carbonyl) methyl-2'-O-methyl uridine	
70	mcm ⁵ s ² U	GL100736 CAS#20299-15-4 5-Methoxycarbonyl methyl-2-thiouridine	
71	nm ⁵ s ² U	GL103226 (component, CAS#109666-14-0) 5-Aminomethyl-2-thiouridine hydro chloride	
	nm ⁵ U	GL103221 (component: CAS#190448-73-8) 5-Aminomethyl uridine hydrochloride	
72	mnm ⁵ U	5-(N-Methyl)amino methyl uridine 72667-55-1	
		GL100372 ; CAS#163496-07-9 5-(N-Methyl-N-trifluoromethyl acetyl)aminomethyl uridine	
73	mnm ⁵ s ² U	GL100716 CAS#32860-54-1 5-(Methylamino methyl)-2-thiouridine	
		GL100717 ; CAS#89128-99-4 5-(N-Methyl-N-trifluoroacetyl-aminomethyl)-2-thiouridine	
75	ncm ⁵ U	GL100714 CAS#29569-30-0 5-Carbamoylmethyl uridine	
77	cmnm ⁵ U	GL100920 ; CAS#69181-26-6 Uridine-5-methyl amino acetic acid	
80	m ⁶ ₂ A	GL102056 CAS#2620-62-4 <i>N</i> ⁶ , <i>N</i> ⁶ -Dimethyl adenosine	
81	Im	GL100161 CAS#3881-21-8 2'-O-methylinosine	
82	m ⁴ C	GL100336 CAS#10578-79-7 <i>N</i> ⁴ -Methylcytidine	

83	m ⁴ Cm	GL100727 CAS#13048-95-8 <i>N</i> ⁴ , <i>O</i> ^{2'} -Dimethyl cytidine	
84	hm ⁵ C	GL100359 CAS#19235-17-7 5-Hydroxymethyl cytidine	
85	m ³ U	GL102209 CAS#2140-69-4 <i>N</i> ³ -Methyluridine	
86	m ¹ acp ³ Ψ	1-Methyl-3-(3-amino-3-carboxypropyl) pseudouridine; 52777-29-4	
86	m ¹ acp ³ Ψ	GL103100 ; CAS#1024616-79-2 <i>N</i> ¹ -Methyl- <i>N</i> ³ -(<i>S</i> -3-amino-3-hydroxycarbonyl)propyl pseudouridine	
87	cm ⁵ U	GL100388 CAS#20964-06-1 5-(Carbonyl)methyluridine; Uridine-5-acetic acid	
88	m ⁶ Am	GL102100 CAS#57817-83-1 <i>N</i> ⁶ -Methyl-2'- <i>O</i> -methyladenosine	
89	m ⁶ ₂ Am	GL102099 CAS#30891-53-3 <i>N</i> ⁶ , <i>N</i> ⁶ -Dimethyl-2'- <i>O</i> -methyladenosine	
90	m ^{2,7} G	GL100880; CAS#62122-07-0; <i>N</i> ² , <i>N</i> ⁷ -Dimethyl guanosine (ship and use immediately)	
91	m ^{2,2,7} G	GL103289 ; 40027-70-1 <i>N</i> ² , <i>N</i> ² ,7-Trimethyl guanosine (95% purity only)	
92	m ³ Um	GL102213 CAS#7103-27-7 <i>N</i> ³ -Methyl-2'- <i>O</i> -methyluridine	
93	m ⁵ D	GL100710 CAS#23067-10-9 5-Methyl-5,6-dihydrouridine	
94	m ³ Ψ	GL100358 CAS#81691-06-7 3-Methylpseudouridine	
95	f ⁵ Cm	GL100738 CAS#176858-79-0 5-Formyl-2'- <i>O</i> -methylcytidine	
96	m ¹ Gm	GL102692 CAS#73667-71-7 <i>N</i> ¹ ,2'- <i>O</i> -dimethylguanosine	

97	m ¹ Am	GL103161 CAS#91101-00-7 2'-O-Methyl-N ¹ -methyladenosine	
100	imG-14	GL100966 CAS#59327-60-5 N ⁴ -Desmethyl wyosine	
101	imG2	GL100965 CAS#577773-09-2 7-Methyl wyosine; Isowyosine	
102	ac ⁶ A	GL100887 CAS#16265-37-5 N ⁶ -Acetyl adenosine	
103	inm ⁵ U	GL100719 CAS#872710-76-4 5-(N-Isopentenyl)aminomethyl uridine	
		GL100720 ; CAS#1613530-43-0 5-(N-Isopentenyl-N-trifluoroacetyl)aminomethyluridine	
107	m ⁴ ₂ Cm	GL100337 CAS#34218-81-0 N,N-Dimethyl-2'-O-methylcytidine	
109	m ⁸ A	GL101683 CAS#56973-12-7 8-Methyladenosine	
112	cnm ⁵ U	GL100971 CAS#58479-73-5 5-Cyanomethyl uridine	
	m4,4C	GL102132 CAS#13007-43-7 N ⁴ ,N ⁴ -Dimethylcytidine	
	ncm5s2U	GL100912 ; CAS#29900-40-1 5-Aminocarbonylmethyl-2-thiouridine 5-carbamoylmethyl-2-thiouridine	
	M2,8A	GL100943 CAS#63954-66-5 2,8-Dimethyladenosine	
The compounds below can be made			
25	f ⁵ C	5-Formylcytidine 148608-53-1	
41	imG	Wyosine 52662-10-9	
42	mimG	Methylwyosine 108274-04-0	

49	G ⁺	Archaeosine 148608-52-0	
56	Ψm	2'-O-Methylpseudouridine 2140-68-3	
61	acp ³ U	3-(3-Amino-3-carboxypropyl)uridine 52745-94-5	
66	chm ⁵ U	5-(Carboxyhydroxy methyl)uridine 89708-80-5	
74	mnm ⁵ se ² U	5-methylaminomethyl-2-selenouridine 89314-80-7	
76	ncm ⁵ Um	5-Carbamoylmethyl-2'-O-methyluridine 60197-30-0	
78	cmnm ⁵ Um	5-Carboxymethylamino methyl- 2'-O-methyl uridine; 110419-13-1	
79	cmnm ⁵ s ² U	5-Carboxymethylamino methyl-2-thiouridine; 78173-95-2	
98	τm ⁵ U	5-Taurinomethyluridine 497258-53-4	
99	τm ⁵ s ² U	5-Taurinomethyl-2-thiouridine 497258-54-5	
106	m ^{2,7} Gm	N ² ,7,2'-O-Trimethyl guanosine 872710-82-2	
104	inm ⁵ s ² U	5-(Isopentenylaminomethyl)-2-thiouridine; 872710-78-6	
105	inm ⁵ Um	5-(Isopentenylamino methyl)-2'-O-methyl uridine; 872710-80-0	
	309U	3-(3-Amino-3-carboxypropyl)pseudouridine	
	531U, nchm ⁵ U	Uridine 5-alpha-hydroxy acetamide 5-carbamoylhydroxy methyluridine	