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## Solution Structure of the Complex between the Head-To-Tail Dimer of Calicheamicin $\gamma_1^{I}$ Oligosaccharide and a DNA Duplex Containing d(ACCT) and d(TCCT) High Affinity Binding Sites

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## **Supporting Information**

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## **Figure Captions**

Fig S1. Region from Hahn Echo NOESY of the HTD complex ( $\tau_m = 200$  ms mixing time, 27 °C in D<sub>2</sub>O) showing  $d_i(6.8;2')$ ,  $d_s(2'';6.8)$ ,  $d_i(5Me;6)$ ,  $d_s(6.8;5Me)$  connectivities.

Fig S2. Region from Hahn Echo NOESY of the HTD complex ( $\tau_m = 200$  ms mixing time, 27 °C in D<sub>2</sub>O) showing  $d_i(6,8;1')$ ,  $d_s(1';6,8)$  connectivities.

Fig S3. Region from Hahn Echo NOESY of the HTD complex ( $\tau_m = 200$  ms mixing time, 27 °C in D<sub>2</sub>O) showing  $d_i(1'; 4')$  connectivities.







Structure Number	X displacement	Inclination	Twist	Rise
1	-2.0	22.0	32.7	2.6
2	2.2	5.8	36.0	3.4
3	2.5	-0.0	36.0	3.4
4	2.2	5.8	26.0	3.4
5	2.2	5.8	45.9	3.4
6	-2.0	22.0	36.9	2.6
7	-2.0	21.9	27.0	2.6
8	2.2	22.0	32.7	3.4
9	-2.0	22.0	32.7	3.4
10	-0.2	10.3	38.0	4.0
11	-1.4	16.0	32.5	3.8
12	-5.0	25.0	35.9	3.0
13	-0.7	25.0	35.9	4.0
14	-2.0	26.9	30.0	4.0
15	-1.3	16.0	33.0	3.0
16	-1.3	4.5	32.9	2.9
17	-0.5	6.2	39.9	3.6
18	-2.0	12.5	37.9	3.8
19	2.5	12.8	36.0	3.7
20	-0.0	12.8	36.0	3.7

Table S1. Helical parameters of the twenty initial NAB-generated DNA conformations used in the structure calculations for the 1:1 complex of d(GCACCTTCCTGC)<sup>-</sup> d(GCAGGAAGGTGC) and HTD (4).

**Table S2**. NMR derived distance constraints used in the structure calculation protocol for the 1:1 complex of d(GCACCTTCCTGC)<sup>-</sup>d(GCAGGAAGGTGC)-HTD (4).

Residue No.	Residue	Proton	Residue No.	Residue	Proton	Upper bound
1	GUA	Ы1,	1	GUA	цõ	distance
1	GUA	и1,	2	CVT	110 U6	4.12
1	GUA	ці,	2			5.42 2.60
1	CUA		2			3.09
1	GUA	F18	2		HD HA1	3.33
1	GUA	Hð	2	CYI	H41	3.05
1	GUA	H8	2	CYT	H42	4.13
1	GUA	HI	23	GUA	Hl	5.14
1	GUA	Hl	24	CYT	H42	5.27
1	GUA	H3'	2	CYT	H6	5.07
1	GUA	H3'	2	CYT	H5	5.20
1	GUA	H2'	2	CYT	H6	3.15
1	GUA	H2'	2	CYT	H5	2.49
1	GUA	H2'	2	CYT	H41	4.47
1	GUA	H2"	2	CYT	H6	4.90
1	GUA	H2"	2	CYT	H5	3.86
1	GUA	H2"	2	CYT	H41	5.13
2	CYT	H4'	2	CYT	H6	4.75
2	CYT	H1'	2	CYT	H6	4.04
2	CYT	H1'	3	ADE	H8	3.99
2	CYT	H6	2	CYT	H5	2.69
$\overline{2}$	CYT	H6	$\overline{2}$	CŶŤ	H41	4 87
$\overline{2}$	CYT	H6	3	ADE	HS	5.28
$\overline{2}$	CYT	H5	2	CYT	HA1	2 70
2	CVT	н5	2		11 <del>4</del> 1 1142	2.70
$\tilde{2}$	CVT	H5	22	GUA	1142 111	5.95
2	CVT	Ц/1	25	CVT	111 1142	2.25
2	CVT	11+1 11/1	$\frac{2}{22}$		1142 Mo	2.04
2	CVT		22	GUA		4.95
2		H42	23		Mo	4.24
2		1142 LIAD	22			4.03
$\frac{2}{2}$		1142 UAD	22			4.24
2		1142	25	CVT		2.74
2		П42 II2)	24		H42	4.90
2		п <i>э</i> цо,	2	ADE	Hð	5.05
2			2	ADE	Hð	3.75
2		HZ	3	ADE	H8	2.45
3	ADE		3	ADE	H8	5.24
3	ADE	HI	3	ADE	H8	4.19
3	ADE	HI'	3	ADE	H2	4.96
3	ADE	H1′	4	CYT	H6	3.55
3	ADE	HI'	4	CYT	H5	4.36
3	ADE	H8	4	CYT	H5	3.93
3	ADE	H8	4	CYT	H41	4.33
3	ADE	H2	21	GUA	H1	4.30
3	ADE	H2	22	THY	H3	3.16
3	ADE	H2	23	GUA	H1	4.63
3	ADE	H3'	4	CYT	H6	5.11
3	ADE	H2'	4	CYT	H6	4.10
3	ADE	H2'	4	CYT	H5	3.53

3	ADE	H2'	4	CYT	H41	5.15
3	ADE	H2"	4	CYT	H6	2.49
3	ADE	H2"	4	CYT	H5	2.99
3	ADE	H2"	4	CYT	H41	5.19
4	CYT	H4'	4	CYT	H6	4.84
4	CYT	H1'	4	CYT	H6	4.02
4	CYT	H1'	5	CYT	H6	3.66
4	CYT	H1'	5	CYT	H5	4 43
4	CYT	H6	4	CYT	H5	2 70
Å	CYT	H6	4	CYT	H41	4.80
4	CVT	но Н6	5	CVT	1141 115	4 10
т Л	CVT	H6	5			4.19
т Л	CVT	LI5	1		1141 U/1	4.74
4	CVT	115	4		П41 Ц42	2.72
4			4		H42	3.98
4		FID LIE	2		FID	4.99
4	CYI	HS	ົ	CYT	H41	4.17
4	CYT	HS	2	CYT	H42	5.02
4	CYT	H41	4	CYT	H42	2.04
4	CYT	H41	5	CYT	H41	4.48
4	CYT	H41	5	CYT	H42	4.40
4	CYT	H41	21	GUA	H1	4.28
4	CYT	H42	5	CYT	H41	4.61
4	CYT	H42	5	CYT	H42	3.91
4	CYT	H42	20	GUA	H1	4.65
4	CYT	H42	21	GUA	H1	2.78
4	CYT	H42	22	THY	H3	5.15
4	CYT	H3'	5	CYT	H6	5.06
4	ĊYT	H2'	5	ĊYT	ĤĜ	4 02
4	ĊŶŦ	H2'	5	ČYT	HS	3 42
4	CYT	H2'	5	CŶŦ	H41	5 08
4	CYT	H2"	5	CYT	HG	2 44
4	CYT	H2"	5	CVT	H5	2.44
4	CYT	H2"	5	CVT	H/1	5 20
5	CVT	н <i>г</i> ,	5	CVT	11 <del>4</del> 1 U6	J.20 1 95
5		114 U1	5			4.03
5		LII LI1	5			4.02
5			5		F10	3.88
5			5			2.70
5			5		H41	4.90
5		П0 115	5		IVIE	4.01
) 5		FID 115	5		H41	2.72
5		HD	2	CYT	H42	3.98
2	CYT	HS	6	THY	Me	4.80
ວັ	CYT	H41	5	CYT	H42	2.05
2	CYT	H41	20	GUA	H1	4.30
2	CYT	H41	21	GUA	H1	5.16
5	CYT	H42	6	THY	H3	4.81
5	CYT	H42	20	GUA	H1	2.79
5	CYT	H42	21	GUA	H1	4.30
5	CYT	Н3'	6	THY	H6	5.14
5	CYT	H2'	6	THY	H6	3.98
5	CYT	H2'	6	THY	Me	4.32
5	CYT	H2"	6	THY	H6	2.49
5	CYT	H2"	6	THY	Me	4 43
6	THY	H4'	6	THY	H6	4 95
-			~	<b>* * * *</b>	111/	

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6	THY	H1'	6	THY	H6	4.03
6	THY	H1'	6	THY	H3	4.92
6	THY	H1'	7	THY	H6	3.95
6	THY	H6	6	THY	Me	3.97
6	THY	H6	6	THY	H3	5.11
6	THY	H6	$\tilde{7}$	THY	Me	4 47
6	THY	Me	6	THY	H3	4.94
6	THY	Me	$\tilde{\vec{7}}$	THY	Me	4 87
Ğ	THY	H3	7	THY	H3	3.81
6	THY	H3	18	ADE	H2	5 30
6	THY	H3	10		H2 H2	3.50
6	THY	H3	20	GUA	112 U1	2.75
6	THY	H2'	20	TUV	ПП Ц6	5.75
6		н <u>э</u> чэ,	7	THV	110 116	J.10
6		LI2,	7		Mo	4.02
6		112 LIOW	7			4.34
6		112 U?"	7			2.32
7		П2 Ц <i>А</i> ,	7		NIC IIC	4.41
7			7		HO	4.96
7			1		HO	4.03
7			/		H3	4.92
/	IHY	HI	8	CYT	H6	3.68
/	THY	HI	8	CYT	H5	4.43
7	THY	H6	$\frac{7}{2}$	THY	Me	3.96
7	THY	H6	7	THY	H3	5.11
7	THY	H6	8	CYT	H5	3.98
7	THY	H6	8	CYT	H41	4.55
7	THY	Me	7	THY	H3	4.95
7	THY	Me	8	CYT	H41	3.86
7	THY	Me	8	CYT	H42	4.54
7	THY	H3	8	CYT	H5	5.22
7	THY	H3	8	CYT	H41	4.63
7	THY	H3	8	CYT	H42	4.08
7	THY	H3	17	GUA	H1	4.01
7	THY	H3	18	ADE	H2	3.14
7	THY	H3	19	ADE	H2	4.24
7	THY	Н3'	8	CYT	H6	5.08
7	THY	H2'	8	CYT	H6	4 04
7	THY	H2'	8	CYT	HS	3 45
7	THY	H2'	8 8	CYT	H41	5.13
7	THY	H2"	8 8	CYT	H6	2 45
7	THY	H2"	8 8	CYT	H5	2.45
7	THY	H2"	Ř	CYT	H41	5 21
8	CYT	H4'	8	CYT	H6	J.21 A 8A
8	CYT	H1'	8	CYT	но Н6	4.04
8	CYT	H1'	Q Q	CVT	но Н6	3.67
Ř	CVT	н1,	o o	CVT	110 115	3.07
8	CVT	и1,	18		115 112	5 22
8	CVT	ЧК	δ 10		112 115	J.43 2 70
8		110 116	O Q		נח 1811	4.70
Q Q		110 UA	0 0		П41 ПС	4.89
0			У 0		HD	4.15
0		H0	9		H41	4.71
ð o		HD	ð	CYT	H41	2.72
ð	CYT	HS	8	CYT	H42	3.97
ð	CYT	H5	9	CYT	H5	4.97

8 8	CYT CYT	H5 H5	9 9	CYT CYT	H41 H42	4.15 5.01
8	CYT	H41	8	CYT	H42	2.04
8	CYT	H41	9	CYT	H41	4.40
8	CYT	H41	9	CYT	H42	4.33
8	CYT	H41	17	GUA	HI	4.31
0 8		П42 Ц42	9		П41 ЦИЭ	4.39
8	CYT	H42	16	GUA	H1	5.90 4.66
8	ČŶŤ	H42	17	GUA	H1	2.80
8	CYT	H3'	9	CYT	H6	5.07
8	CYT	H2'	9	CYT	H6	4.00
8	CYT	H2'	9	CYT	H5	3.42
8	CYT	H2′	9	CYT	H41	5.08
8 8		H2" H2"	9		HO US	2.44
8	CYT	H2"	9	CYT	H41	5.00
9	ĊŶŦ	H4'	ģ	CYT	H6	4.85
9	CYT	H1'	9	CYT	H6	4.02
9	CYT	H1'	10	THY	H6	3.93
9	CYT	H6	9	CYT	H5	2.70
9	CYT	HO	9		H41	4.90
9	CYT	H5	10 Q		Me H41	4.38
<u>9</u>	CYT	H5	9	CYT	H42	3 98
9	ĊŶŤ	H5	10	THY	Me	4.77
9	CYT	H41	9	CYT	H42	2.05
9	CYT	H41	16	GUA	H1	4.30
9	CYT	H41	17	GUA	H1	5.13
9		H42	10		H3 U1	4.79
9	CYT	H42	10	GUA	H1	2.19 4.27
9	ČŶŤ	H3'	10	THY	H6	5.15
9	CYT	H2'	10	THY	H6	3.98
9	CYT	H2'	10	THY	Me	4.31
9	CYT	H2"	10	THY	H6	2.50
9 10			10		Me	4.44
10		H1'	10		H6	4.90
10	THY	H1'	10	THY	H3	4.92
10	THY	H1'	11	GUA	H8	3.85
10	THY	H6	10	THY	Me	3.96
10	THY	H6	10	THY	H3	5.11
10	THY	H6	11	GUA	H8	5.19
10		Me	10		H3 1141	4.95
10	THY	Me	14	CYT	H41 H42	4.97 4 84
10	THY	H3	11	GUA	H1	4.33
10	THY	H3	14	CYT	H42	4.29
10	THY	H3	15	ADE	H2	3.17
10	THY	H3	16	GUA	H1	3.74
10		H3′ u2		GUA	H8	5.12
10		п∠ Н?"	11	GUA	Нठ मर्	3.93 2 16
10	* * * *	114	T T	UUA	110	2.40

11       GUA       H1'       11       GUA       H8       4.19         11       GUA       H1'       12       CYT       H6       3.57         11       GUA       H8       12       CYT       H5       3.37         11       GUA       H8       12       CYT       H4       4.33         11       GUA       H1       12       CYT       H4       4.34         11       GUA       H1       13       GUA       H1       5.16         11       GUA       H1       14       CYT       H42       2.49         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H2'       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2''       12       CYT       H4       5.26         11       GUA       H2''       12	11	GUA	H4'	11	GUA	H8	5.21
11       GUA       H1'       12 $CYT$ H5       3.57         11       GUA       H1'       12 $CYT$ H5       4.33         11       GUA       H8       12 $CYT$ H5       3.97         11       GUA       H8       12 $CYT$ H41       4.34         11       GUA       H1       13       GUA       H1       5.26         11       GUA       H1       14 $CYT$ H42       4.39         11       GUA       H1       14 $CYT$ H42       4.39         11       GUA       H1       14 $CYT$ H42       4.39         11       GUA       H1       14 $CYT$ H42       2.74         11       GUA       H2'       12 $CYT$ H6       4.08         11       GUA       H2'       12 $CYT$ H6       4.08         11       GUA       H2''       12 $CYT$ H4       5.27         11       GUA       H2''       12 $CYT$ H4       5.20         11       GUA       H2'	11	GUA	H1'	11	GUA	H8	4.19
11       GUA       Hi       12       CYT       H5       4.33         11       GUA       H8       12       CYT       H5       3.97         11       GUA       H8       12       CYT       H41       4.34         11       GUA       H1       12       CYT       H41       4.34         11       GUA       H1       12       CYT       H41       4.34         11       GUA       H1       14       CYT       H42       4.39         11       GUA       H1       14       CYT       H41       4.24         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H2'       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2''       12       CYT       H6       2.95         11       GUA       H2''       12       CYT       H6       4.88         12       CYT       H6       12	11	GUA	H1'	12	CYT	H6	3 57
11       GUA       H8       12       CYT       H5       3.97         11       GUA       H8       12       CYT       H41       4.34         11       GUA       H1       12       CYT       H42       4.39         11       GUA       H1       13       GUA       H1       5.66         11       GUA       H1       14       CYT       H42       4.39         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H3       12       CYT       H6       5.05         11       GUA       H3'       12       CYT       H6       4.08         11       GUA       H2''       12       CYT       H6       4.08         11       GUA       H2''       12       CYT       H4       5.26         11       GUA       H2''       12       CYT       H4       5.27         11       GUA       H2''       12       CYT       H4       5.27         12       CYT       H4       12	11	GUA	H1'	12	CŶŤ	H5	4 33
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11	GUA	HR	12	CYT	H5	3 07
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11	GUA	110 112	12	CVT		J.77 A 2A
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11	GUA	110 U1	12		П41 ЦИЭ	4.54
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11	CUA		12		F142	4.39
11       GUA       H1       14       CYT       H41       4.2       4.6         11       GUA       H1       14       CYT       H42       2.74         11       GUA       H1       15       ADE       H2       4.62         11       GUA       H3'       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2'       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         11       GUA       H2'''       12       CYT       H6       2.46         11       GUA       H2'''       12       CYT       H6       4.83         12       CYT       H4''       12       CYT       H6       4.03         12       CYT       H6       12       CYT       H41       2.82         12       CYT       H42       13       GUA       H1       4.84         13       GUA       H1'	11	GUA		15	GUA	HI II	5.16
11       GUA       H1       14       CY1       H41       4.24         11       GUA       H1       14       CYT       H42       2.274         11       GUA       H3       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H6       4.62         11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2'       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         12       CYT       H4'       12       CYT       H6       4.03         12       CYT       H6       12       CYT       H41       4.98         12       CYT       H41       12       CYT       H41       4.82         12       CYT       H42       13 </td <td></td> <td>GUA</td> <td></td> <td>14</td> <td></td> <td>HD</td> <td>5.26</td>		GUA		14		HD	5.26
11       GUA       H1       14       CY1       H42       2.74         11       GUA       H3'       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2'       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         11       GUA       H2''       12       CYT       H6       2.46         11       GUA       H2'''       12       CYT       H6       2.46         12       CYT       H4'       12       CYT       H6       4.88         12       CYT       H6       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H41       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       14<	11	GUA	HI II1	14	CYI	H41	4.24
11       GUA       H1       15       ADE       H2       4,62         11       GUA       H3'       12       CYT       H6       5,65         11       GUA       H2'       12       CYT       H6       4,62         11       GUA       H2'       12       CYT       H6       4,62         11       GUA       H2'       12       CYT       H6       4,62         11       GUA       H2''       12       CYT       H6       2,46         12       CYT       H4'       12       CYT       H6       4,33         12       CYT       H6       12       CYT       H4       2,72         12       CYT       H6       12       CYT       H41       2,82         12       CYT       H42       13       GUA       H1       14       2,77         14       CYT       H42 <td>11</td> <td>GUA</td> <td>HI</td> <td>14</td> <td>CYT</td> <td>H42</td> <td>2.74</td>	11	GUA	HI	14	CYT	H42	2.74
11       GUA       H3'       12       CYT       H6       5.05         11       GUA       H2'       12       CYT       H5       3.48         11       GUA       H2'       12       CYT       H5       3.48         11       GUA       H2'       12       CYT       H4       5.15         11       GUA       H2''       12       CYT       H4       5.295         11       GUA       H2''       12       CYT       H4       5.295         11       GUA       H2''       12       CYT       H4       5.295         12       CYT       H4'       12       CYT       H6       4.88         12       CYT       H6       12       CYT       H6       4.03         12       CYT       H6       12       CYT       H41       4.98         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       2.82         12       CYT       H42       13       GUA       H1       3.52         13       GUA       H1'       14<	11	GUA	HI	15	ADE	H2	4.62
11       GUA       H2'       12       CYT       H6       4.08         11       GUA       H2'       12       CYT       H5       3.48         11       GUA       H2'       12       CYT       H41       5.15         11       GUA       H2''       12       CYT       H41       5.295         11       GUA       H2''       12       CYT       H41       5.295         12       CYT       H4'       12       CYT       H6       4.03         12       CYT       H4'       12       CYT       H6       4.03         12       CYT       H6       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       13       GUA       H1       5.26         12       CYT       H42       13       GUA       H1'       14       CYT       H42       4.88	11	GUA	H3'	12	CYT	H6	5.05
11       GUA       H2'       12       CYT       H5       3.48         11       GUA       H2'       12       CYT       H41       5.15         11       GUA       H2''       12       CYT       H46       2.46         11       GUA       H2'''       12       CYT       H46       2.48         12       CYT       H4'       12       CYT       H46       4.88         12       CYT       H4'       12       CYT       H6       4.88         12       CYT       H6       12       CYT       H41       2.92         12       CYT       H6       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       5.3.67         13       GUA       H1'       14       CYT       H42       4.82         13       GUA       H8       14       CYT       H5       3.60         13       GUA       H8	11	GUA	H2'	12	CYT	H6	4.08
11GUAH2'12CYTH415.1511GUAH2"12CYTH62.4611GUAH2"12CYTH52.9511GUAH2"12CYTH415.2212CYTH4'12CYTH64.8812CYTH1'12CYTH64.0312CYTH612CYTH44.9812CYTH612CYTH414.9812CYTH512CYTH412.8212CYTH4112CYTH424.0212CYTH4112CYTH424.0212CYTH4112CYTH424.0212CYTH4213GUAH15.2212CYTH4213GUAH15.2213GUAH1'14CYTH424.8813GUAH1'14CYTH53.6713GUAH814CYTH63.1713GUAH814CYTH413.0613GUAH814CYTH65.1013GUAH3'14CYTH65.1013GUAH2'14CYTH64.1714CYTH4'14CYTH64.1713GUAH	11	GUA	H2'	12	CYT	H5	3.48
11GUAH2"12CYTH62.4611GUAH2"12CYTH52.9511GUAH2"12CYTH415.2212CYTH4'12CYTH64.8812CYTH1'12CYTH64.8312CYTH612CYTH64.0312CYTH612CYTH412.8212CYTH512CYTH424.0212CYTH4112CYTH424.0212CYTH4112CYTH424.0212CYTH4213GUAH15.2212CYTH4214CYTH424.0212CYTH4213GUAH15.2013GUAH1'14CYTH53.6013GUAH3'14CYTH65.1013GUAH3'14CYTH55.2013GUAH2'14CYTH53.6613GUAH2'14CYTH64.1713GUAH2'14CYTH63.1713GUAH2'14CYTH63.1613GUAH2'14CYTH63.1713GUAH2'14CYTH63.1714CYTH	11	GUA	H2'	12	CYT	H41	5.15
11GUAH2"12CYTH52.9511GUAH2"12CYTH45.2212CYTH4'12CYTH64.8812CYTH1'12CYTH64.8812CYTH612CYTH64.0312CYTH612CYTH44.9812CYTH512CYTH412.8212CYTH412CYTH424.0212CYTH4112CYTH424.0212CYTH4213GUAH15.2212CYTH4213GUAH15.2212CYTH4213GUAH15.2212CYTH4214CYTH424.0012CYTH4213GUAH15.2213GUAH1'14CYTH424.8813GUAH1'14CYTH63.6713GUAH814CYTH53.6013GUAH814CYTH413.0613GUAH814CYTH424.1513GUAH3'14CYTH63.1713GUAH2'14CYTH63.1713GUAH2'14CYTH64.9113GUAH2'<	11	GUA	H2"	12	CYT	H6	2.46
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11	GUA	H2"	12	CYT	H5	2.95
12 $CYT$ $H4'$ 12 $CYT$ $H6$ $4.88$ 12 $CYT$ $H1'$ 12 $CYT$ $H6$ $4.03$ 12 $CYT$ $H6$ 12 $CYT$ $H5$ $2.72$ 12 $CYT$ $H6$ 12 $CYT$ $H41$ $4.98$ 12 $CYT$ $H5$ 12 $CYT$ $H41$ $2.82$ 12 $CYT$ $H41$ 12 $CYT$ $H42$ $4.02$ 12 $CYT$ $H42$ 13 $GUA$ $H1$ $5.22$ 12 $CYT$ $H42$ 13 $GUA$ $H1$ $5.22$ 13 $GUA$ $H1'$ 14 $CYT$ $H42$ $4.88$ 13 $GUA$ $H8$ 14 $CYT$ $H5$ $3.60$ 13 $GUA$ $H8$ 14 $CYT$ $H42$ $4.15$ 13 $GUA$ $H8$ 14 $CYT$ $H45$ $5.20$ 13 $GUA$ $H2'$ 14 $CYT$	11	GUA	H2"	12	CYT	H41	5.22
12 $CYT$ $H1'$ 12 $CYT$ $H6$ 4.03         12 $CYT$ $H6$ 12 $CYT$ $H5$ 2.72         12 $CYT$ $H6$ 12 $CYT$ $H41$ 4.98         12 $CYT$ $H5$ 12 $CYT$ $H41$ 4.98         12 $CYT$ $H5$ 12 $CYT$ $H42$ 4.02         12 $CYT$ $H41$ 12 $CYT$ $H42$ 4.02         12 $CYT$ $H42$ 13 $GUA$ $H1$ 5.22         12 $CYT$ $H42$ 14 $CYT$ $H42$ 4.02         13 $GUA$ $H1'$ 14 $CYT$ $H42$ 4.88         13 $GUA$ $H8$ 14 $CYT$ $H41$ 3.06         13 $GUA$ $H8$ 14 $CYT$ $H42$ 4.15         13 $GUA$ $H3'$ 14 $CYT$ $H6$ 5.10         13 $GUA$ $H2'$ 14 $CYT$ $H6$ <	12	CYT	H4'	12	CYT	H6	4.88
12       CYT       H6       12       CYT       H5       2.72         12       CYT       H6       12       CYT       H41       4.98         12       CYT       H5       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H41       2.82         12       CYT       H41       12       CYT       H42       4.02         12       CYT       H41       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       14       CYT       H42       4.88         13       GUA       H1'       13       GUA       H8       4.14         13       GUA       H1'       14       CYT       H5       3.60         13       GUA       H8       14       CYT       H41       3.06         13       GUA       H3'       14       CYT       H45       5.20         13       GUA       H2'       14       CYT       H5       5.20         13       GUA       H2'       14 <td>12</td> <td>ĊYT</td> <td>H1'</td> <td>12</td> <td>CYT</td> <td>H6</td> <td>4 03</td>	12	ĊYT	H1'	12	CYT	H6	4 03
12       CYT       H6       12       CYT       H41       4.98         12       CYT       H5       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H41       2.82         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       14       CYT       H42       4.88         13       GUA       H1'       13       GUA       H8       4.14         13       GUA       H1'       14       CYT       H5       3.67         13       GUA       H8       14       CYT       H5       3.60         13       GUA       H8       14       CYT       H41       3.060         13       GUA       H8       14       CYT       H42       4.15         13       GUA       H3'       14       CYT       H46       5.10         13       GUA       H2'       14       CYT       H5       5.20         13       GUA       H2'       14 <td>12</td> <td>ĊŶŦ</td> <td>H6</td> <td>12</td> <td>CYT</td> <td>HS</td> <td>2 72</td>	12	ĊŶŦ	H6	12	CYT	HS	2 72
12       CYT       H5       12       CYT       H41       1.282         12       CYT       H5       12       CYT       H42       4.02         12       CYT       H41       12       CYT       H42       4.02         12       CYT       H41       12       CYT       H42       4.02         12       CYT       H41       12       CYT       H42       4.02         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       14       CYT       H42       4.88         13       GUA       H1'       14       CYT       H43       4.14         13       GUA       H1'       14       CYT       H5       3.67         13       GUA       H8       14       CYT       H5       3.60         13       GUA       H3'       14       CYT       H42       4.15         13       GUA       H3'       14       CYT       H6       3.10         13       GUA       H2'       14       CYT       H6       3.17         13       GUA       H2'       14	12	CYT	H6	12	CYT	H41	4 98
12       CYT       H5       12       CYT       H42       2.02         12       CYT       H41       12       CYT       H42       2.06         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       14       CYT       H42       4.88         13       GUA       H1'       13       GUA       H8       4.14         13       GUA       H1'       14       CYT       H6       3.41         13       GUA       H8       14       CYT       H5       3.60         13       GUA       H8       14       CYT       H42       4.83         13       GUA       H8       14       CYT       H42       4.15         13       GUA       H3'       14       CYT       H42       4.15         13       GUA       H2'       14       CYT       H6       5.10         13       GUA       H2'       14       CYT       H6       4.91         13       GUA       H2''       14 <td>12</td> <td>ĊŶŦ</td> <td>HS</td> <td>12</td> <td>CYT</td> <td>H41</td> <td>2 82</td>	12	ĊŶŦ	HS	12	CYT	H41	2 82
12       CYT       H41       12       CYT       H42       2.06         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       13       GUA       H1       5.22         12       CYT       H42       14       CYT       H42       4.88         13       GUA       H1'       14       CYT       H42       4.88         13       GUA       H1'       14       CYT       H5       3.67         13       GUA       H1'       14       CYT       H5       3.60         13       GUA       H8       14       CYT       H41       3.06         13       GUA       H8       14       CYT       H42       4.15         13       GUA       H3'       14       CYT       H6       5.10         13       GUA       H2'       14       CYT       H6       3.17         13       GUA       H2'       14       CYT       H6       4.91         13       GUA       H2'       14       CYT       H6       4.91         13       GUA       H2''       14 </td <td>12</td> <td>CYT</td> <td>HŠ</td> <td>12</td> <td>CYT</td> <td>H42</td> <td>4.02</td>	12	CYT	HŠ	12	CYT	H42	4.02
12CYTH4112CYTH4213GUAH15.2212CYTH4214CYTH424.8813GUAH1'13GUAH84.1413GUAH1'14CYTH63.4113GUAH1'14CYTH53.6713GUAH814CYTH53.6613GUAH814CYTH413.0613GUAH814CYTH424.1513GUAH3'14CYTH65.1013GUAH3'14CYTH63.1713GUAH2'14CYTH63.1713GUAH2'14CYTH64.9113GUAH2'14CYTH64.9113GUAH2''14CYTH64.9113GUAH2''14CYTH64.9113GUAH2''14CYTH64.0314CYTH4'14CYTH64.0314CYTH614CYTH64.0314CYTH614CYTH414.8614CYTH614CYTH414.8614CYTH614CYTH414.8614CYTH614CYTH414.86 <td>12</td> <td>CYT</td> <td>H41</td> <td>12</td> <td>CVT</td> <td>H42</td> <td>2.06</td>	12	CYT	H41	12	CVT	H42	2.06
12CYT14213COA11 $3.22$ 13GUAH1'13GUAH424.8813GUAH1'13GUAH84.1413GUAH1'14CYTH63.4113GUAH1'14CYTH53.6713GUAH814CYTH53.6013GUAH814CYTH413.0613GUAH814CYTH424.1513GUAH3'14CYTH65.1013GUAH2'14CYTH55.2013GUAH2'14CYTH52.5013GUAH2'14CYTH63.1713GUAH2'14CYTH64.9113GUAH2''14CYTH64.9113GUAH2''14CYTH64.0314CYTH4'14CYTH64.0314CYTH4'14CYTH64.0314CYTH614CYTH52.6914CYTH615ADEH85.2814CYTH614CYTH412.6914CYTH614CYTH64.0314CYTH614CYTH412.6914CYTH6<	12	CVT	H42	12	GUA	LI42	2.00
12 $GTI$ $H42$ $H4$ $GTI$ $H42$ $4.06$ 13 $GUA$ $H1'$ 13 $GUA$ $H8$ $4.14$ 13 $GUA$ $H1'$ 14 $CYT$ $H6$ $3.41$ 13 $GUA$ $H1'$ 14 $CYT$ $H5$ $3.67$ 13 $GUA$ $H8$ 14 $CYT$ $H5$ $3.60$ 13 $GUA$ $H8$ 14 $CYT$ $H41$ $3.06$ 13 $GUA$ $H8$ 14 $CYT$ $H41$ $3.06$ 13 $GUA$ $H3'$ 14 $CYT$ $H42$ $4.15$ 13 $GUA$ $H3'$ 14 $CYT$ $H6$ $5.10$ 13 $GUA$ $H2'$ 14 $CYT$ $H6$ $3.17$ 13 $GUA$ $H2'$ 14 $CYT$ $H5$ $5.20$ 13 $GUA$ $H2'$ 14 $CYT$ $H5$ $5.20$ 13 $GUA$ $H2'$ 14 $CYT$ $H6$ $4.91$ 13 $GUA$ $H2'$ 14 $CYT$ $H5$ $3.86$ 13 $GUA$ $H2''$ 14 $CYT$ $H6$ $4.91$ 14 $CYT$ $H4'$ 14 $CYT$ $H6$ $4.03$ 14 $CYT$ $H4'$ 14 $CYT$ $H6$ $4.03$ 14 $CYT$ $H6$ 14 $CYT$ $H6$ $4.03$ 14 $CYT$ $H6$ 14 $CYT$ $H41$ $2.69$ 14 $CYT$ $H5$ $14$ $CYT$ $H41$ $2.69$ 14 </td <td>12</td> <td>CVT</td> <td>HA2</td> <td>14</td> <td>CVT</td> <td>111 UA2</td> <td>J.22 1 00</td>	12	CVT	HA2	14	CVT	111 UA2	J.22 1 00
13GUAH113GUAH64.1413GUAH1'14CYTH63.4113GUAH1'14CYTH53.6713GUAH814CYTH53.6013GUAH814CYTH413.0613GUAH814CYTH424.1513GUAH814CYTH65.1013GUAH3'14CYTH63.1713GUAH2'14CYTH55.2013GUAH2'14CYTH63.1713GUAH2'14CYTH64.9113GUAH2'14CYTH64.9113GUAH2''14CYTH64.9114CYTH4'14CYTH64.7414CYTH4'14CYTH64.7414CYTH1'14CYTH64.0314CYTH1'14CYTH64.0414CYTH614CYTH64.0414CYTH614CYTH42.6914CYTH615ADEH85.2814CYTH514CYTH422.0414CYTH514CYTH422.0414CYTH5 <t< td=""><td>12</td><td>GUA</td><td>11<del>4</del>2 111'</td><td>14</td><td></td><td>1142</td><td>4.00</td></t<>	12	GUA	11 <del>4</del> 2 111'	14		1142	4.00
13GUAH114CTIH0 $3.41$ 13GUAH1'14CYTH5 $3.67$ 13GUAH814CYTH5 $3.60$ 13GUAH814CYTH41 $3.06$ 13GUAH814CYTH42 $4.15$ 13GUAH3'14CYTH6 $5.10$ 13GUAH3'14CYTH6 $3.17$ 13GUAH2'14CYTH6 $3.17$ 13GUAH2'14CYTH6 $4.91$ 13GUAH2'14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 14CYTH4'14CYTH6 $4.03$ 14CYTH4'14CYTH6 $4.03$ 14CYTH1'15ADEH8 $5.26$ 14CYTH614CYTH41 $4.86$ 14CYTH514CYTH42 $3.95$ 14CYTH514CYTH42 $3.95$ 14CYTH514CYTH42 $3.95$ 14CYTH5ADEH8 $3.75$ <	12	GUA	LI1,	13	CVT		4.14
13GUAH114CTIH5 $3.60'$ 13GUAH814CYTH5 $3.60'$ 13GUAH814CYTH41 $3.06'$ 13GUAH814CYTH42 $4.15'$ 13GUAH3'14CYTH6 $5.10'$ 13GUAH3'14CYTH6 $5.10'$ 13GUAH2'14CYTH6 $3.17'$ 13GUAH2'14CYTH6 $4.91'$ 13GUAH2''14CYTH6 $4.91'$ 13GUAH2'''14CYTH5 $3.86'$ 13GUAH2'''14CYTH6 $4.91'$ 14CYTH4''14CYTH6 $4.74'$ 14CYTH4''14CYTH6 $4.03''$ 14CYTH4''14CYTH6 $4.03'''$ 14CYTH614CYTH5 $2.69''''$ 14CYTH614CYTH41 $4.86''''''''''''''''''''''''''''''''''''$	12	GUA	111 U1	14		П0 115	5.41 2.67
13GUAH614C H 1H5 $3.60$ 13GUAH814CYTH41 $3.06$ 13GUAH814CYTH42 $4.15$ 13GUAH3'14CYTH6 $5.10$ 13GUAH2'14CYTH6 $3.17$ 13GUAH2'14CYTH6 $3.17$ 13GUAH2'14CYTH6 $4.91$ 13GUAH2'14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.03$ 14CYTH4'14CYTH6 $4.03$ 14CYTH1'14CYTH6 $4.03$ 14CYTH1'14CYTH6 $4.03$ 14CYTH614CYTH6 $4.03$ 14CYTH614CYTH41 $4.86$ 14CYTH614CYTH41 $2.69$ 14CYTH614CYTH41 $2.69$ 14CYTH514CYTH42 $2.95$ 14CYTH3'15ADEH8 $5.26$ 14CYTH3'15ADEH8 $5.26$	12	GUA		14			3.07
15GUAH614CYTH41 $3.06$ 13GUAH814CYTH42 $4.15$ 13GUAH3'14CYTH6 $5.10$ 13GUAH3'14CYTH5 $5.20$ 13GUAH2'14CYTH6 $3.17$ 13GUAH2'14CYTH6 $4.91$ 13GUAH2'14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 14CYTH4'14CYTH6 $4.91$ 13GUAH2''14CYTH6 $4.91$ 14CYTH4'14CYTH6 $4.91$ 14CYTH4'14CYTH6 $4.03$ 14CYTH4'14CYTH6 $4.03$ 14CYTH614CYTH6 $4.03$ 14CYTH614CYTH4 $2.69$ 14CYTH614CYTH4 $2.69$ 14CYTH514CYTH4 $2.04$ 14CYTH514CYTH42 $2.04$ 14CYTH3'15ADEH8 $5.06$	13	CUA		14			3.00
13GUAH814CY1H424.1513GUAH3'14CYTH65.1013GUAH3'14CYTH55.2013GUAH2'14CYTH63.1713GUAH2'14CYTH64.9113GUAH2'14CYTH64.9113GUAH2''14CYTH64.9113GUAH2''14CYTH53.8613GUAH2''14CYTH64.7414CYTH4'14CYTH64.0314CYTH1'14CYTH64.0314CYTH1'15ADEH84.0014CYTH614CYTH414.8614CYTH614CYTH414.8614CYTH614CYTH412.6914CYTH514CYTH412.6914CYTH514CYTH423.9514CYTH514CYTH423.9514CYTH3'15ADEH85.0614CYTH2'15ADEH83.7514CYTH2''15ADEH83.75	12	CUA		14		F141	3.00
13GUAH3'14CYIH65.1013GUAH3'14CYTH55.2013GUAH2'14CYTH63.1713GUAH2'14CYTH52.5013GUAH2'14CYTH414.4713GUAH2''14CYTH64.9113GUAH2''14CYTH64.9113GUAH2''14CYTH64.9114CYTH414CYTH64.7414CYTH4'14CYTH64.0314CYTH1'15ADEH84.0014CYTH614CYTH52.6914CYTH614CYTH414.8614CYTH614CYTH414.8614CYTH514CYTH412.9514CYTH514CYTH423.9514CYTH3'15ADEH83.7514CYTH2''15ADEH83.75	13	GUA		14		H42	4.15
13GUAH3'14CYTH55.2013GUAH2'14CYTH63.1713GUAH2'14CYTH52.5013GUAH2'14CYTH414.4713GUAH2''14CYTH64.9113GUAH2''14CYTH64.9113GUAH2''14CYTH53.8613GUAH2''14CYTH45.1214CYTH4'14CYTH64.7414CYTH4'14CYTH64.0314CYTH1'15ADEH84.0014CYTH614CYTH52.6914CYTH614CYTH414.8614CYTH615ADEH85.2814CYTH514CYTH422.0414CYTH514CYTH422.0414CYTH3'15ADEH85.0614CYTH3'15ADEH83.7514CYTH2''15ADEH83.75	13	GUA	H3	14	CYI	Ho	5.10
13GUAH2'14CYTH6 $3.17$ 13GUAH2'14CYTH5 $2.50$ 13GUAH2'14CYTH41 $4.47$ 13GUAH2"14CYTH6 $4.91$ 13GUAH2"14CYTH5 $3.86$ 13GUAH2"14CYTH5 $3.86$ 14CYTH4'14CYTH6 $4.74$ 14CYTH4'14CYTH6 $4.03$ 14CYTH1'15ADEH8 $4.00$ 14CYTH614CYTH5 $2.69$ 14CYTH614CYTH41 $4.86$ 14CYTH514CYTH41 $2.69$ 14CYTH514CYTH41 $2.69$ 14CYTH514CYTH42 $3.95$ 14CYTH514CYTH42 $2.04$ 14CYTH3'15ADEH8 $5.06$ 14CYTH2'15ADEH8 $3.75$ 14CYTH2''15ADEH8 $3.75$	13	GUA	H3'	14	CYT	HS	5.20
13GUAH2'14CYTH52.5013GUAH2'14CYTH414.4713GUAH2"14CYTH64.9113GUAH2"14CYTH53.8613GUAH2"14CYTH415.1214CYTH4'14CYTH64.7414CYTH4'14CYTH64.0314CYTH1'15ADEH84.0014CYTH614CYTH52.6914CYTH614CYTH414.8614CYTH615ADEH85.2814CYTH514CYTH423.9514CYTH3'15ADEH85.0614CYTH3'15ADEH85.0614CYTH2''15ADEH83.7514CYTH2''15ADEH83.75	13	GUA	H2'	14	CYT	H6	3.17
13GUAH2'14CYTH414.4713GUAH2"14CYTH64.9113GUAH2"14CYTH53.8613GUAH2"14CYTH415.1214CYTH4'14CYTH64.7414CYTH4'14CYTH64.0314CYTH1'15ADEH84.0014CYTH614CYTH52.6914CYTH614CYTH414.8614CYTH615ADEH85.2814CYTH514CYTH412.6914CYTH514CYTH423.9514CYTH3'15ADEH85.0614CYTH3'15ADEH85.0614CYTH2''15ADEH83.7514CYTH2''15ADEH83.75	13	GUA	H2'	14	CYT	H5	2.50
13GUA $H2''$ 14CYTH64.9113GUA $H2''$ 14CYT $H5$ 3.8613GUA $H2''$ 14CYT $H41$ 5.1214CYTH4'14CYTH64.7414CYTH4'14CYTH64.0314CYTH1'14CYTH64.0014CYTH1'15ADEH84.0014CYTH614CYTH52.6914CYTH615ADEH85.2814CYTH615ADEH85.2814CYTH514CYTH412.6914CYTH514CYTH423.9514CYTH3'15ADEH85.0614CYTH3'15ADEH83.7514CYTH2''15ADEH83.7514CYTH2''15ADEH83.75	13	GUA	H2'	14	CYT	H41	4.47
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	13	GUA	H2"	14	CYT	H6	4.91
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	13	GUA	H2"	14	CYT	H5	3.86
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	13	GUA	H2"	14	CYT	H41	5.12
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	14	CYT	H4'	14	CYT	H6	4.74
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	14	CYT	H1'	14	CYT	H6	4.03
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14	CYT	H1'	15	ADE	H8	4.00
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14	CYT	H6	14	CYT	H5	2.69
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14	CYT	H6	14	CYT	H41	4.86
14       CYT       H5       14       CYT       H41       2.69         14       CYT       H5       14       CYT       H42       3.95         14       CYT       H41       14       CYT       H42       3.95         14       CYT       H41       14       CYT       H42       2.04         14       CYT       H3'       15       ADE       H8       5.06         14       CYT       H2'       15       ADE       H8       3.75         14       CYT       H2''       15       ADE       H8       3.75         14       CYT       H2''       15       ADE       H8       3.75	14	CYT	H6	15	ADE	H8	5.28
14       CYT       H5       14       CYT       H42       3.95         14       CYT       H41       14       CYT       H42       2.04         14       CYT       H3'       15       ADE       H8       5.06         14       CYT       H2'       15       ADE       H8       3.75         14       CYT       H2'       15       ADE       H8       3.75         14       CYT       H2''       15       ADE       H8       3.75         14       CYT       H2''       15       ADE       H8       2.46	14	CYT	H5	14	CYT	H41	2.69
14CYTH4114CYTH422.0414CYTH3'15ADEH85.0614CYTH2'15ADEH83.7514CYTH2''15ADEH82.46	14	CYT	H5	14	CYT	H42	3 95
14     CYT     H3'     15     ADE     H8     5.06       14     CYT     H2'     15     ADE     H8     3.75       14     CYT     H2''     15     ADE     H8     3.75       14     CYT     H2''     15     ADE     H8     3.75	14	CYT	H41	14	CYT	H42	2.04
14         CYT         H2'         15         ADE         H8         3.75           14         CYT         H2"         15         ADE         H8         3.75	14	CYT	H3'	15	ADE	HR	5.04
14 CYT H2" 15 ADE H8 2.46	14	ČYT	H2'	15	ADF	HR	2.00
	14	ČŶŤ	H2"	15	ADE	H	2.75 2.46

15	ADE	H4'	15	ADE	H8	5.24
15	ADE	H1'	15	ADE	H8	4.20
15	ADE	H1'	15	ADE	H2	4.95
15	ADE	H1'	16	GUA	H8	3 70
15	ADE	H8	16	GUA	HR	5 19
15	ADE	H2	16	GUA	H1	A 77
15	ADE	H3'	16	GUA	HS	5 17
15		ц <u>э</u>	16	GUA	110	J.17 4 01
15		ц2»	16	GUA	110	4.01
16	GUA	112 UA	16	GUA	110 110	2.30
16	CUA	114 U1	10	CUA		5.18
10	GUA	пі ці,	10	GUA		4.20
16	CUA		17	GUA		3.70
10	GUA		17	GUA	HI	3.73
10	GUA	F13	17	GUA	Hð	5.15
10	GUA	HZ'	17	GUA	H8	3.99
10	GUA	H2″	17	GUA	H8	2.49
1/	GUA	H4′	17	GUA	H8	5.21
17	GUA	HI'	17	GUA	H8	4.20
17	GUA	H1'	18	ADE	H8	3.71
17	GUA	H8	18	ADE	H8	5.28
17	GUA	H1	18	ADE	H2	4.31
17	GUA	H3'	18	ADE	H8	5.14
17	GUA	H2'	18	ADE	H8	4.00
17	GUA	H2"	18	ADE	H8	2.48
18	ADE	H4'	18	ADE	H8	5.19
18	ADE	H1'	18	ADE	H8	4 20
18	ADE	H1'	18	ADE	H2	4 94
18	ADE	H1'	19	ADE	Ĥ	3 67
18	ADE	H8	19	ADE	H8	5.07
18	ADE	H2	19	ADE	H2	4 19
18	ADE	H3'	19	ADE	HR	5 13
18	ADE	H2'	19	ADE	110	3.08
18	ADE	H2"	19		110	2.20
10	ADE	HA'	10		110	2.47
10	ADE	Ц1 <sup>2</sup>	10		110	J.17 4 10
10		111 111	19			4.19
19	ADE	111	19	ADE		4.94
19	ADE		20	GUA		3.72
19			20	GUA	Hð	5.26
19	ADE	F12	20	GUA	HI	4.72
19	ADE	H3 <sup>°</sup>	20	GUA	H8	5.14
19	ADE	H2'	20	GUA	H8	3.95
19	ADE	H2″	20	GUA	H8	2.47
20	GUA	H4′	20	GUA	H8	5.20
20	GUA	H1'	20	GUA	H8	4.20
20	GUA	H1'	21	GUA	H8	3.67
20	GUA	H8	21	GUA	H8	5.29
20	GUA	H1	21	GUA	H1	3.76
20	GUA	H3'	21	GUA	H8	5.11
20	GUA	H2'	21	GUA	H8	3.99
20	GUA	H2"	21	GUA	H8	2.46
21	GUA	H4'	21	GUA	H8	5.19
21	GUA	H1'	21	GUA	H	4 20
21	GUA	H1'	22	THY	HĞ	3 77
21	GUA	H8	$\overline{\overline{22}}$	THY	Me	4 44
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21	GUA	H1	22	THY	H3	3.94
21	GUA	H3'	22	THY	H6	5.16
21	GUA	H2'	22	THY	H6	4.07
21	GUA	H2'	22	THY	Me	4.36
21	GUA	H2"	22	THY	H6	2.52
21	GUA	H2"	22	THY	Me	4.35
22	THY		22	THY	H6	4.95
22	THY	HI	22	THY	H6	4.03
22			22	THY	H3	4.92
22		HI	23	GUA	H8	3.82
22		HO	22	THY	Me	3.97
22			22		H3	5.12
22		Mo	23		F18	5.21
22		IVIE LI2	22		H3	4.95
22		пэ Ц2,	23	GUA		4.32
22		нэ нэ,	23	GUA	По ЦQ	3.12
22		н2»	23	GUA	По 110	3.94 2.46
22	GUA	нл'	23	GUA	По Ц9	2.40
23	GUA	H1'	23	GUA	П0 Ц8	J.21 4 10
23	GUA	H1'	23	CYT	H6	4.17
$\frac{23}{23}$	GUA	H1'	24	CYT	H5	4 33
23	GUA	H8	24	CYT	H5	3 98
23	GUA	H8	24	CYT	H41	4 35
23	GUA	H1	24	CYT	H42	4 38
23	GUA	H3'	24	CYT	H6	5.05
23	GUA	H2'	24	ĊŶŦ	H6	4.08
23	GUA	H2'	24	CYT	H5	3.48
23	GUA	H2'	24	CYT	H41	5.15
23	GUA	H2"	24	CYT	H6	2.47
23	GUA	H2"	24	CYT	H5	2.95
23	GUA	H2"	24	CYT	H41	5.21
24	CYT	H4'	24	CYT	H6	4.88
24	CYT	H1'	24	CYT	H6	4.03
24	CYT	H6	24	CYT	H5	2.72
24	CYT	H6	24	CYT	H41	4.98
24	CYT	H5	24	CYT	H41	2.82
24		HD	24	CYT	H42	4.02
24	CYI	H41	24	CYT	H42	2.06
1	GUA	Hð	1	GUA	H2′	3.39
1	GUA	Hð UC	1	GUA	H2″	2.65
2			2		HZ'	2.31
2			2		HZ"	3.78
3		по Ц	2	ADE	HZ' HO?	2.28
4	CYT	H6	3	CVT	п∠ ⊔วי	3.02
4	CYT	H6	4		112 112"	2.21
5	CYT	H6		CYT	H2'	2.03
5	CYT	H6	5	CYT	H2"	2.20
6	THÝ	ĤĞ	6	THY	H2'	2.07
6	THY	H6	6	THY	H2"	3.61
7	THY	H6	$\overline{7}$	THY	H2'	2.15
7	THY	H6	7	THY	H2"	3.56
8	CYT	H6	8	CYT	H2'	2.16

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CYT	H6	8	CYT	H2"	3.59
CYT	H6	9	CYT	H2'	2.17
CYT	H6	9	CYT	H2"	3.64
THY	H6	10	THY	H2'	2.12
THY	H6	10	THY	H2"	3.49
GUA	H8	11	GUA	H2'	2.24
GUA	H8	11	GUA	H2"	3.52
GUA	H8	13	GUA	H2'	3.53
GUA	H8	13	GUA	H2"	2.74
CYT	H6	14	CYT	H2'	2.28
CYT	H6	14	CYT	H2"	3.75
ADE	H8	15	ADE	H2'	2.28
ADE	H8	15	ADE	H2"	3.67
GUA	H8	16	GUA	H2'	2.33
GUA	H8	16	GUA	H2"	3.71
GUA	H8	17	GUA	H2'	2.27
GUA	H8	17	GUA	H2"	3.66
ADE	H8	18	ADE	H2'	2.26
ADE	H8	18	ADE	H2"	3.67
ADE	H8	19	ADE	H2'	2.30
ADE	H8	19	ADE	H2"	3.74
GUA	H8	20	GUA	H2'	2.29
GUA	H8	20	GUA	H2"	3.65
GUA	H8	21	GUA	H2'	2.25
GUA	H8	21	GUA	H2"	3.70
THY	H6	22	THY	H2'	2.11
THY	H6	22	THY	H2"	3.47
GUA	H8	23	GUA	H2'	2.25
GUA	H8	23	GUA	H2"	3.57
GUA	H8	1	GUA	H3'	4.97
CYT	H6	2	CYT	H3'	3.85
ADE	Hð	3	ADE	H3'	4.36
CYT	HO	4	CYT	H3'	3.98
	HO	2		H3'	3.82
	HO	0		H3 <sup>°</sup>	3.93
	HO	/		H3 <sup>°</sup>	4.03
	HO	ð			3.97
		9		H3 112,	3.83
	П0 Ц0	10		ПЭ 112,	4.08
CVT	H6	11	CVT	115	4.43
GUA	H8	12	GUA	113 112'	5.04
CYT	H6	13	CVT	H3'	3.00
ADE	H8	15		H3'	J.02 A 20
GUA	H8	15	GUA	H3'	4.23
GUA	H8	10	GUA	H3'	4 29
ADE	HS	18	ADE	H3'	4.25
ADE	H8	19	ADE	H3'	4 20
GUA	HŘ	20	GUA	H3'	4.20 1 35
GUA	HÅ	$\tilde{21}$	GUA	H3'	4.18
THY	H6	$\overline{22}$	THY	H3'	4 11
GUA	H8	$\frac{1}{23}$	GUA	H3'	4.43
CYT	H6	24	ĊŸT	H3'	3.93
CYT	H5'	4	ĊYT	H6	4.13
	CYT CYT CYT THY GUA GUA GUA GUA GUA GUA GUA GUA GUA GUA	CYT       H6         CYT       H6         THY       H6         THY       H6         GUA       H8         GUA       H8 <t< td=""><td>CYTH68CYTH69CYTH610THYH610THYH610GUAH811GUAH813GUAH813CYTH614CYTH614CYTH614CYTH614ADEH815ADEH816GUAH817GUAH817GUAH817ADEH818ADEH819GUAH820GUAH820GUAH821GUAH821GUAH823GUAH823GUAH823GUAH81CYTH62ADEH81CYTH65THYH66THYH66THYH610GUAH811CYTH612GUAH811CYTH612GUAH813CYTH614ADEH818ADEH818ADEH819GUAH817ADEH818ADEH819GUAH817ADEH818ADEH8<!--</td--><td>CYT         H6         8         CYT           CYT         H6         9         CYT           THY         H6         10         THY           GUA         H8         11         GUA           GUA         H8         11         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         15         ADE           ADE         H8         15         ADE           GUA         H8         16         GUA           GUA         H8         16         GUA           GUA         H8         17         GUA           GUA         H8         17         GUA           ADE         H8         18         ADE           ADE         H8         19         ADE           ADE         H8         19         ADE           ADE         H8         20         GUA           GUA         H8         21         GUA           GUA&lt;</td><td>CYT         H6         8         CYT         H2"           CYT         H6         9         CYT         H2"           THY         H6         10         THY         H2"           THY         H6         10         THY         H2"           GUA         H8         11         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         15         ADE         H2"           CYT         H6         14         CYT         H2"           GUA         H8         15         ADE         H2"           GUA         H8         16         GUA         H2"           GUA         H8         17         GUA         H2"           GUA         H8         10         ADE</td></td></t<>	CYTH68CYTH69CYTH610THYH610THYH610GUAH811GUAH813GUAH813CYTH614CYTH614CYTH614CYTH614ADEH815ADEH816GUAH817GUAH817GUAH817ADEH818ADEH819GUAH820GUAH820GUAH821GUAH821GUAH823GUAH823GUAH823GUAH81CYTH62ADEH81CYTH65THYH66THYH66THYH610GUAH811CYTH612GUAH811CYTH612GUAH813CYTH614ADEH818ADEH818ADEH819GUAH817ADEH818ADEH819GUAH817ADEH818ADEH8 </td <td>CYT         H6         8         CYT           CYT         H6         9         CYT           THY         H6         10         THY           GUA         H8         11         GUA           GUA         H8         11         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         15         ADE           ADE         H8         15         ADE           GUA         H8         16         GUA           GUA         H8         16         GUA           GUA         H8         17         GUA           GUA         H8         17         GUA           ADE         H8         18         ADE           ADE         H8         19         ADE           ADE         H8         19         ADE           ADE         H8         20         GUA           GUA         H8         21         GUA           GUA&lt;</td> <td>CYT         H6         8         CYT         H2"           CYT         H6         9         CYT         H2"           THY         H6         10         THY         H2"           THY         H6         10         THY         H2"           GUA         H8         11         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         15         ADE         H2"           CYT         H6         14         CYT         H2"           GUA         H8         15         ADE         H2"           GUA         H8         16         GUA         H2"           GUA         H8         17         GUA         H2"           GUA         H8         10         ADE</td>	CYT         H6         8         CYT           CYT         H6         9         CYT           THY         H6         10         THY           GUA         H8         11         GUA           GUA         H8         11         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         13         GUA           GUA         H8         15         ADE           ADE         H8         15         ADE           GUA         H8         16         GUA           GUA         H8         16         GUA           GUA         H8         17         GUA           GUA         H8         17         GUA           ADE         H8         18         ADE           ADE         H8         19         ADE           ADE         H8         19         ADE           ADE         H8         20         GUA           GUA         H8         21         GUA           GUA<	CYT         H6         8         CYT         H2"           CYT         H6         9         CYT         H2"           THY         H6         10         THY         H2"           THY         H6         10         THY         H2"           GUA         H8         11         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         13         GUA         H2"           GUA         H8         15         ADE         H2"           CYT         H6         14         CYT         H2"           GUA         H8         15         ADE         H2"           GUA         H8         16         GUA         H2"           GUA         H8         17         GUA         H2"           GUA         H8         10         ADE

4 $CYT$ $H5"$ 5 $CYT$ $H5'$ 9 $CYT$ $H5'$ 18 $ADE$ $H5'$ 18 $ADE$ $H5''$ 22 $THY$ $H5'$ 22 $THY$ $H5''$ 23 $ADE$ $H4'$ 4 $CYT$ $H4'$ 5 $CYT$ $H4'$ 6 $THY$ $H4'$ 7 $THY$ $H4'$ 8 $CYT$ $H4'$ 9 $CYT$ $H4'$ 10 $THY$ $H4'$ 11 $GUA$ $H4'$ 12 $CYT$ $H4'$ 13 $GUA$ $H4'$ 14 $CYT$ $H4'$ 15 $ADE$ $H4'$ 16 $GUA$ $H4'$ 17 $GUA$ $H4'$ 18 $ADE$ $H4'$ 20 $GUA$ $H4'$ 21 $GUA$ $H4'$ 22 $THY$ $H4'$ 23 $GUA$ $H4'$ 24 $CYT$ $H4'$ 25 $SUG$ $AMe$ 25 $SUG$ $H1D$ 25 $SUG$ $H1D$ 25 $SUG$ $H2D$ 25 $SUG$ $H1D$ 25 $SUG$ $H1B$ 25 $SUG$ $H1B$ 25 $SUG$ $H1B$	$\begin{array}{c} 4\\ 5\\ 9\\ 9\\ 9\\ 18\\ 18\\ 22\\ 22\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19\\ 20\\ 21\\ 22\\ 23\\ 24\\ 4\\ 5\\ 9\\ 18\\ 22\\ 4\\ 5\\ 5\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ 22\\ $	CYT CYT CYT ADE ADE THY THY GUA CYT ADE CYT CYT THY CYT CYT THY GUA CYT GUA CYT ADE GUA GUA ADE GUA GUA ADE GUA CYT CYT CYT CYT CYT CYT THY CYT THY GUA CYT THY GUA CYT THY GUA CYT THY THY GUA CYT THY CYT THY CYT THY GUA CYT THY CYT THY CYT THY CYT THY GUA CYT THY CYT THY CYT THY CYT THY GUA CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT THY CYT T CYT CYT THY CYT CYT THY CYT CYT THY CYT CYT THY THY THY THY THY THY THY THY THY T	$\begin{array}{c} H6\\ H6\\ H6\\ H6\\ H8\\ H8\\ H6\\ H1'\\ H1'\\ H1'\\ H1'\\ H1'\\ H1'\\ H1'\\ H1'$	$\begin{array}{c} 4.69\\ 4.10\\ 4.13\\ 4.59\\ 4.44\\ 4.99\\ 4.44\\ 4.95\\ 2.60\\ 3.07\\ 2.99\\ 2.92\\ 2.91\\ 2.97\\ 3.02\\ 2.92\\ 2.91\\ 2.97\\ 3.02\\ 2.92\\ 3.02\\ 2.99\\ 3.02\\ 2.99\\ 3.02\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\ 3.00\\$
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25 25	SUG	AMe BMe	25 25	SUG	H2B1	5.00
25	SUG	DMe	25	SUG	C8Me	4.00
25	SUG	H1D	25	SUG	C8Me	3.00
25	SUG	AMe H1A	25	SUG	HIB	3.00
25	SUG	H1A	25	SUG	H5A	3.00
25	SUG	H3A	25	SUG	H5A	3.00
25	SUG	H2A	25	SUG	H4A	3.00
25	SUG	HIB	25	SUG	H5B	3.00
25 25	SUG		25 25	SUG	H4B H2E1	3.00
25	SUG	H3E	25	SUG	H5E1	3.00
27	SUG	AMe	$\overline{20}$	GUA	H4'	4.00
27	SUG	BMe	9	CYT	H4'	5.00
27	SUG	C7Me	9	CYT	H1'	4.00
27	SUG	H2B1 H2B2	18	ADE	H2 LID	3.00
27	SUG	C9Me	18	ADE	H5'	5.00
27	SUG	C9Me	18	ADE	H5"	5.00
27	SUG	H1D	18	ADE	H5'	3.00
27	SUG	H1D	18	ADE	H5"	5.00
27	SUG	H2D H2D	18 18	ADE	HD' H5"	4.00
27	SUG	DoMe	17	GUA	H4'	4.00
27	SUG	DoMe	16	GUA	H21	5.00
27	SUG	H1B	19	ADE	H4'	3.00
27	SUG	HIB	19	ADE	H5'	3.00
27	SUG	AMe	27	SUG	H2A H2R1	5.00
27	SUG	BMe	27	SUG	C9Me	3.00
27	SUG	DMe	27	SUG	C8Me	4.00
27	SUG	H1D	27	SUG	C8Me	3.00
27	SUG		27	SUG	HIB	3.00
27	SUG	HIA HIA	27	SUG	H5A	3.00
27	SUG	H3A	27	SUG	H5A	3.00
27	SUG	H2A	27	SUG	H4A	3.00
27	SUG	H1B	27	SUG	H5B	3.00
27	SUG	H2B1 H4F	27	SUG	H4B H2E1	3.00
27	SUG	H3E	27	SUG	H5E1	3.00
1	GUA	N1	24	CYT	N3	3.05
1	GUA	O6	24	CYT	N4	3.01
	GUA	HI	24	CYT	N3	2.35
$\frac{1}{2}$	CYT	N3	24	GUA	п42 N1	2.55
$\overline{2}$	ĊŶŦ	N4	23	GUA	Ô6	3.01
2	CYT	N3	23	GUA	H1	2.35
2	CYT	H42	23	GUA	06	2.35
3 3		IN I N1	22	1日Y THV	N3 H2	2.92
4	CYT	N3	21	GUA	N1	3.05
4	ĊYT	N4	$\overline{\overline{21}}$	GUA	O6	3.01

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4	CYT	N3	21	GUA	H1	2.35
4	CYT	H42	21	GUA ,	. 06	2.35
5	CYT	N3	20	GUA	N1	3.05
5	CYT	N4	20	GUA	O6	3.01
5	CYT	N3	20	GUA	H1	2.35
5	CYT	H42	20	GUA	O6	2.35
6	THY	N3	19	ADE	N1	2.92
6	THY	H3	19	ADE	N1	2.22
7	THY	N3	18	ADE	N1	2.92
7	THY	H3	18	ADE	N1	2.22
8	CYT	N3	17	GUA	N1	3.05
8	CYT	N4	17	GUA	06	3.01
8	CYT	N3	17	GUA	H1	2.35
8	CYT	H42	17	GUA	O6	2.35
9	CYT	N3	16	GUA	N1	3.05
9	CYT	N4	16	GUA	O6	3.01
9	CYT	N3	16	GUA	H1	2.35
9	CYT	H42	16	GUA	O6	2.35
10	THY	N3	15	ADE	N1	2.92
10	THY	H3	15	ADE	N1	2.22
11	GUA	N1	14	CYT	N3	3.05
11	GUA	O6	14	CYT	N4	3.01
11	GUA	H1	14	CYT	N3	2.35
11	GUA	06	14	CYT	H42	2.35
12	CYT	N3	13	GUA	N1	3.05
12	CYT	N4	13	GUA	O6	3.01
12	CYT	N3	13	GUA	H1	2.35
12	CYT	H42	13	GUA	O6	2.35