Recursiver TraceBack

1. Starte bei traceBack(0, Länge RNA-1)

	j	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*#*
i		U	U	U	C	A	G	U	A	G	C	A
0	U	0	0	0	0	2	2	2	4	4	5	6
1	U	0	0	0	0	0	2	2	2	4	4	5
2	U	0	0	0	0	0	0	0	2	3	3	5
3	C	0	0	0	0	0	0	0	0	3	3	3
4	A	0	0	0	0	0	0	0	0	0	3	3
5	G	0	0	0	0	0	0	0	0	0	3	3
6	U	0	0	0	0	0	0	0	0	0	0	2
7	A	0	0	0	0	0	0	0	0	0	0	0
8	G	0	0	0	0	0	0	0	0	0	0	0
9	C	0	0	0	0	0	0	0	0	0	0	0
#	A	0	0	0	0	0	0	0	0	0	0	0

1. Fall:
M(0,10) = 0 ? Nein

2. Fall:
M(0,10) = M(1,10) ? Nein

3. Fall:
M(0,10) = M(1,9) + (U,A) ? **Ja**

Ergebniss = '(' traceBack(1,9) ')' '(((. . . .)) .)'

'((. . . .)) .'

2. traceBack(1,9)

	j	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*#*
i		U	U	U	C	A	G	U	A	G	C	A
0	U	0	0	0	0	2	2	2	4	4	5	6
1	U	0	0	0	0	0	2	2	2	4	4	5
2	U	0	0	0	0	0	0	0	2	3	3	5
3	C	0	0	0	0	0	0	0	0	3	3	3
4	A	0	0	0	0	0	0	0	0	0	3	3
5	G	0	0	0	0	0	0	0	0	0	3	3
6	U	0	0	0	0	0	0	0	0	0	0	2
7	A	0	0	0	0	0	0	0	0	0	0	0
8	G	0	0	0	0	0	0	0	0	0	0	0
9	C	0	0	0	0	0	0	0	0	0	0	0
#	A	0	0	0	0	0	0	0	0	0	0	0

1. Fall:
M(1,9) = 0 ? Nein

2. Fall:
M(1,9) = M(2,9) ? Nein

3. Fall:
M(1,9) = M(2,8) + (U,C) ? Nein

4.Fall:
M(1,9) = M(1,2) + M(3,9)? Nein
M(1,9) = M(1,3) + M(4,9)? Nein
M(1,9) = M(1,4) + M(5,9)? Nein
M(1,9) = M(1,5) + M(6,9)? Nein
M(1,9) = M(1,6) + M(7,9)? Nein
M(1,9) = M(1,7) + M(8,9)? Nein
M(1,9) = M(1,8) + M(9,9)? **Ja**

Ergebnis = traceBack(1,8) + traceBack(9,9)

'((. . . .))' '.'

3a. traceBack(1,8)

i		*j* 0	1	2	3	4	5	6	7	8	9	#
		U	U	U	C	A	G	U	A	G	C	A
0	U	0	0	0	0	2	2	2	4	4	5	6
1	U	0	0	0	0	0	2	2	2	4	4	5
2	U	0	0	0	0	0	0	0	2	3	3	5
3	C	0	0	0	0	0	0	0	0	3	3	3
4	A	0	0	0	0	0	0	0	0	0	3	3
5	G	0	0	0	0	0	0	0	0	0	3	3
6	U	0	0	0	0	0	0	0	0	0	0	2
7	A	0	0	0	0	0	0	0	0	0	0	0
8	G	0	0	0	0	0	0	0	0	0	0	0
9	C	0	0	0	0	0	0	0	0	0	0	0
#	A	0	0	0	0	0	0	0	0	0	0	0

'((. . . .))'

'.'

1. Fall:
M(1,8) = 0 ? Nein

2. Fall:
M(1,8) = M(2,8) ? Nein

3. Fall:
M(1,8) = M(2,7) + (U,G)? **Ja**

Ergebnis = '(' + traceBack(2,7) + ')'

'(. . . .)'

3b. traceBack(9,9)

i		*j* 0	1	2	3	4	5	6	7	8	9	#
		U	U	U	C	A	G	U	A	G	C	A
0	U	0	0	0	0	2	2	2	4	4	5	6
1	U	0	0	0	0	0	2	2	2	4	4	5
2	U	0	0	0	0	0	0	0	2	3	3	5
3	C	0	0	0	0	0	0	0	0	3	3	3
4	A	0	0	0	0	0	0	0	0	0	3	3
5	G	0	0	0	0	0	0	0	0	0	3	3
6	U	0	0	0	0	0	0	0	0	0	0	2
7	A	0	0	0	0	0	0	0	0	0	0	0
8	G	0	0	0	0	0	0	0	0	0	0	0
9	C	0	0	0	0	0	0	0	0	0	0	0
#	A	0	0	0	0	0	0	0	0	0	0	0

1. Fall:
M(9,9) = 0 **Ja**

Ergebnis = '.' * 1

4. traceBack(2,7)

i		*j* 0	1	2	3	4	5	6	7	8	9	#
		U	U	U	C	A	G	U	A	G	C	A
0	U	0	0	0	0	2	2	2	4	4	5	6
1	U	0	0	0	0	0	2	2	2	4	4	5
2	U	0	0	0	0	0	0	0	2	3	3	5
3	C	0	0	0	0	0	0	0	0	3	3	3
4	A	0	0	0	0	0	0	0	0	0	3	3
5	G	0	0	0	0	0	0	0	0	0	3	3
6	U	0	0	0	0	0	0	0	0	0	0	2
7	A	0	0	0	0	0	0	0	0	0	0	0
8	G	0	0	0	0	0	0	0	0	0	0	0
9	C	0	0	0	0	0	0	0	0	0	0	0
#	A	0	0	0	0	0	0	0	0	0	0	0

1. Fall:
M(2,7) = 0 Nein

2. Fall:
M(2,7) = M(3,7) Nein

3. Fall:
M(2,7) = M(3,6) + (U,A) **Ja**

Ergebnis = '(' + traceBack(3,6) + ')'

' . . . . '

5. traceBack(3,6)

	j	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*#*
i		U	U	U	C	A	G	U	A	G	C	A
0	U	0	0	0	0	2	2	2	4	4	5	6
1	U	0	0	0	0	0	2	2	2	4	4	5
2	U	0	0	0	0	0	0	0	2	3	3	5
3	C	0	0	0	0	0	0	0	0	3	3	3
4	A	0	0	0	0	0	0	0	0	0	3	3
5	G	0	0	0	0	0	0	0	0	0	3	3
6	U	0	0	0	0	0	0	0	0	0	0	2
7	A	0	0	0	0	0	0	0	0	0	0	0
8	G	0	0	0	0	0	0	0	0	0	0	0
9	C	0	0	0	0	0	0	0	0	0	0	0
#	A	0	0	0	0	0	0	0	0	0	0	0

1. Fall:

M(3,6) = 0 **Ja**

Ergebnis = '.' * 4