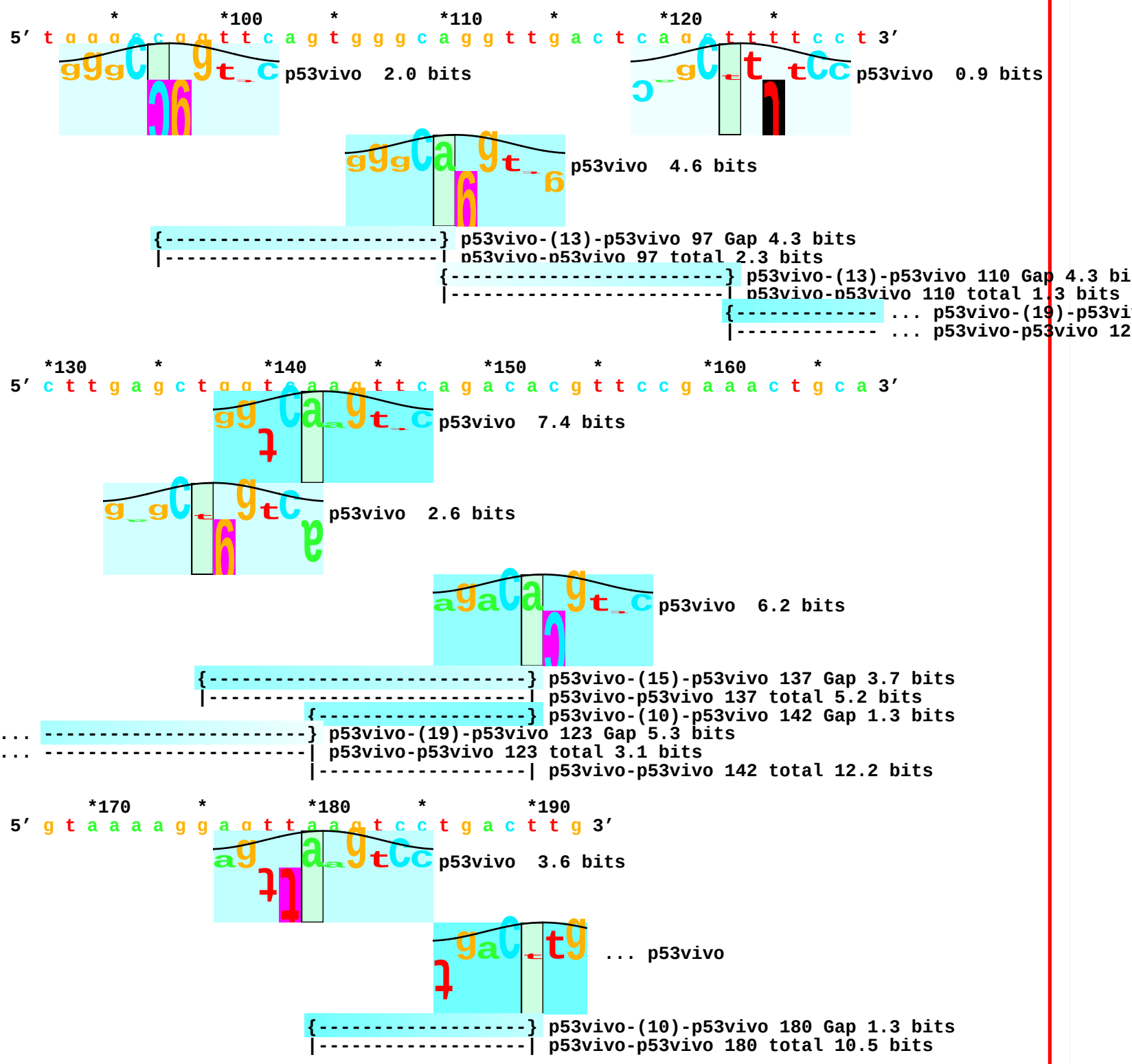
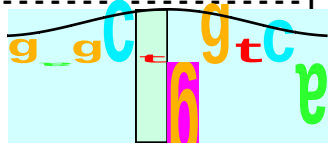
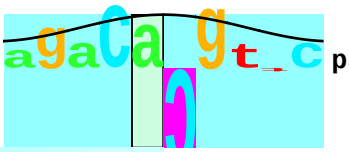
piece 1, U28935, mdm2-1, config: linear, direction: +, begin: 92, end: 192



... |---------------------------| p53vivo-p53vivo 123 total 3.1 bits



p53vivo 2.6 bits

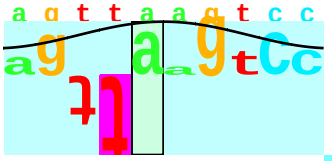


p53vivo 6.2 bits

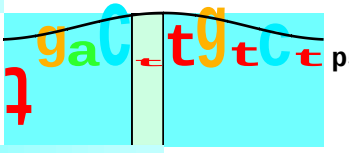
{-----------------------------} p53vivo-(15)-p53vivo 137 Gap 3.7 bits
|-----------------------------| p53vivo-p53vivo 137 total 5.2 bits
{-------------------} p53vivo-(10)-p53vivo 142 Gap 1.3 bits
|-------------------| p53vivo-p53vivo 142 total 12.2 bits

*170 * *180 * *190 * *200 *

5' g t a a a a g g a g t t a a g t c c t g a c t t g t c t c c a g c t g g g g 3'



p53vivo 3.6 bits

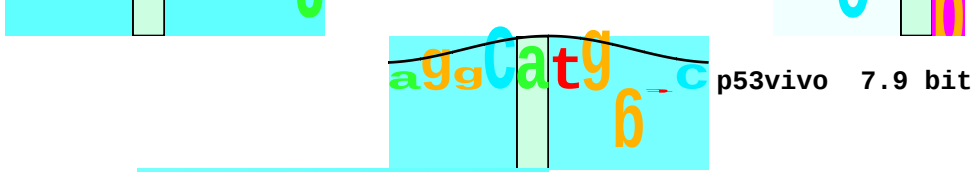


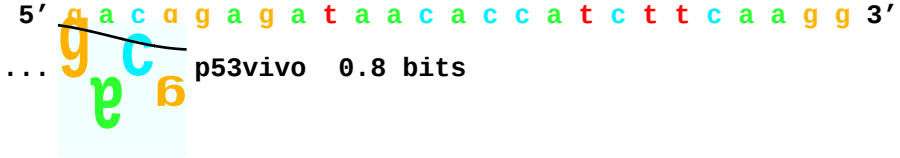
p53vivo 8.3 bits

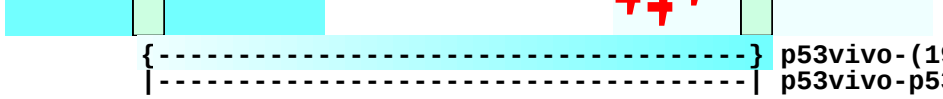
{-------------------} p53vivo-(10)-p53vivo 180 Gap 1.3 bits
|-------------------| p53vivo-p53vivo 180 total 10.5 bits

*210 * *220 * *230

5' c t a t t t a a a c c a t g c a t t t t c c c a g 3'


p53vivo 7.9 bits
{----------} p53vivo-(12)-p53vivo 249 Gap 5.3 bits
|----------| p53vivo-p53vivo 249 total 11.9 bits
{----------} p53vivo-(12)-p53vivo 26
|----------| p53vivo-p53vivo 261 tot


* *280 * *290 *
5′ g a c g g a g a t a a c a c c a t c t t c a a g g 3′
... p53vivo 0.8 bits



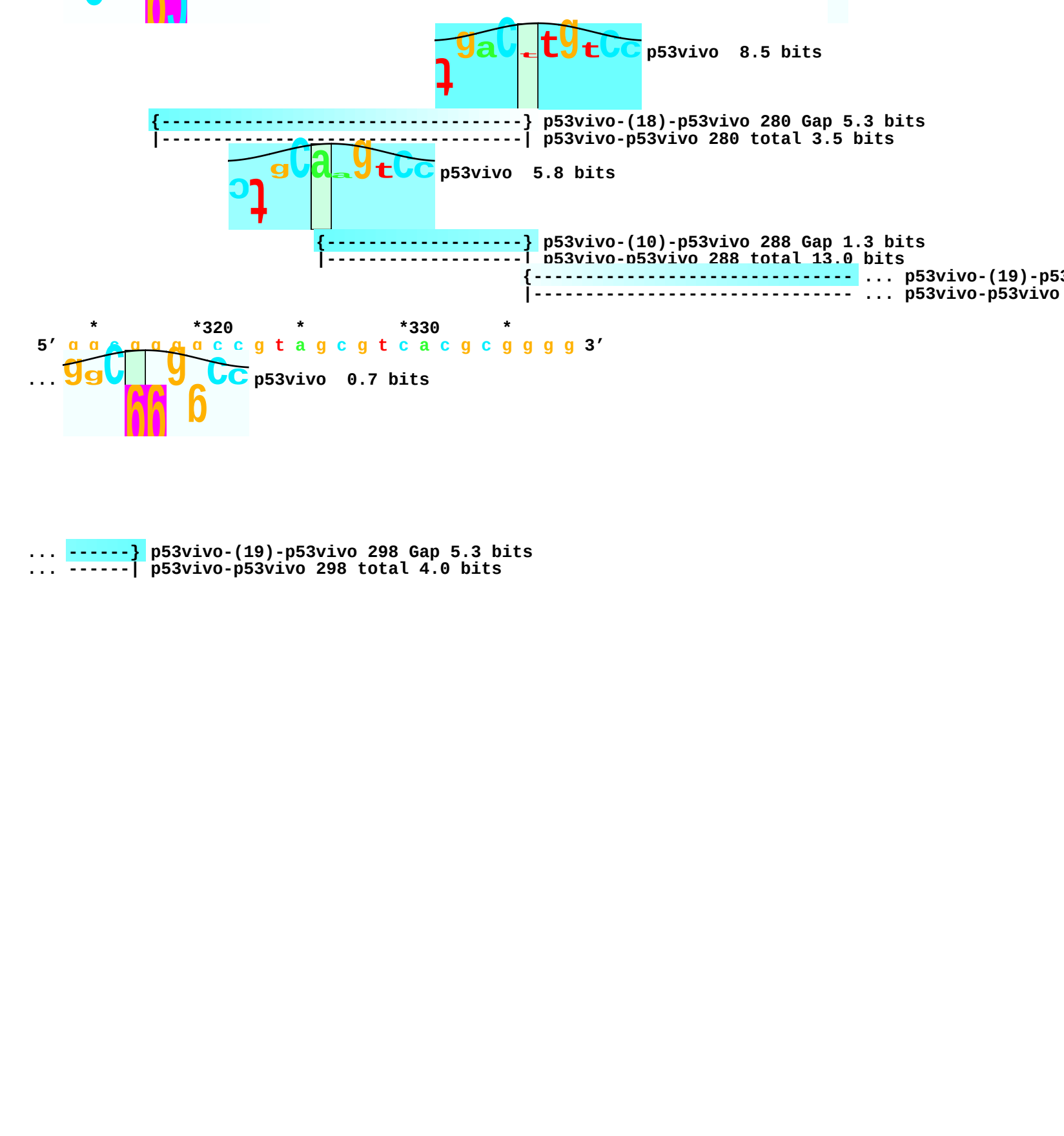

```
   *         *770      *         *780      *
5' c t t c t g a t g t t a c t c c a t g c t t c c 3'
```

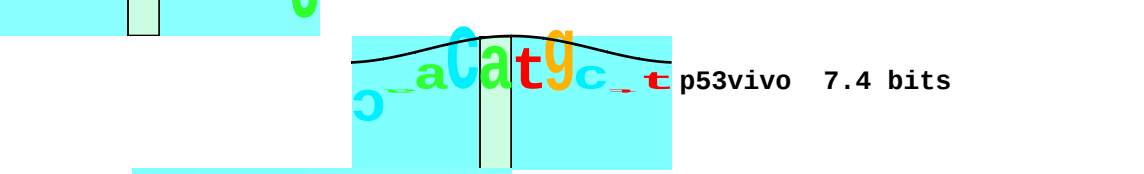
{----------} p53vivo-(11)-p53vivo 944 Gap 2.9 bits
|----------| p53vivo-p53vivo 944 total 7.7 bits

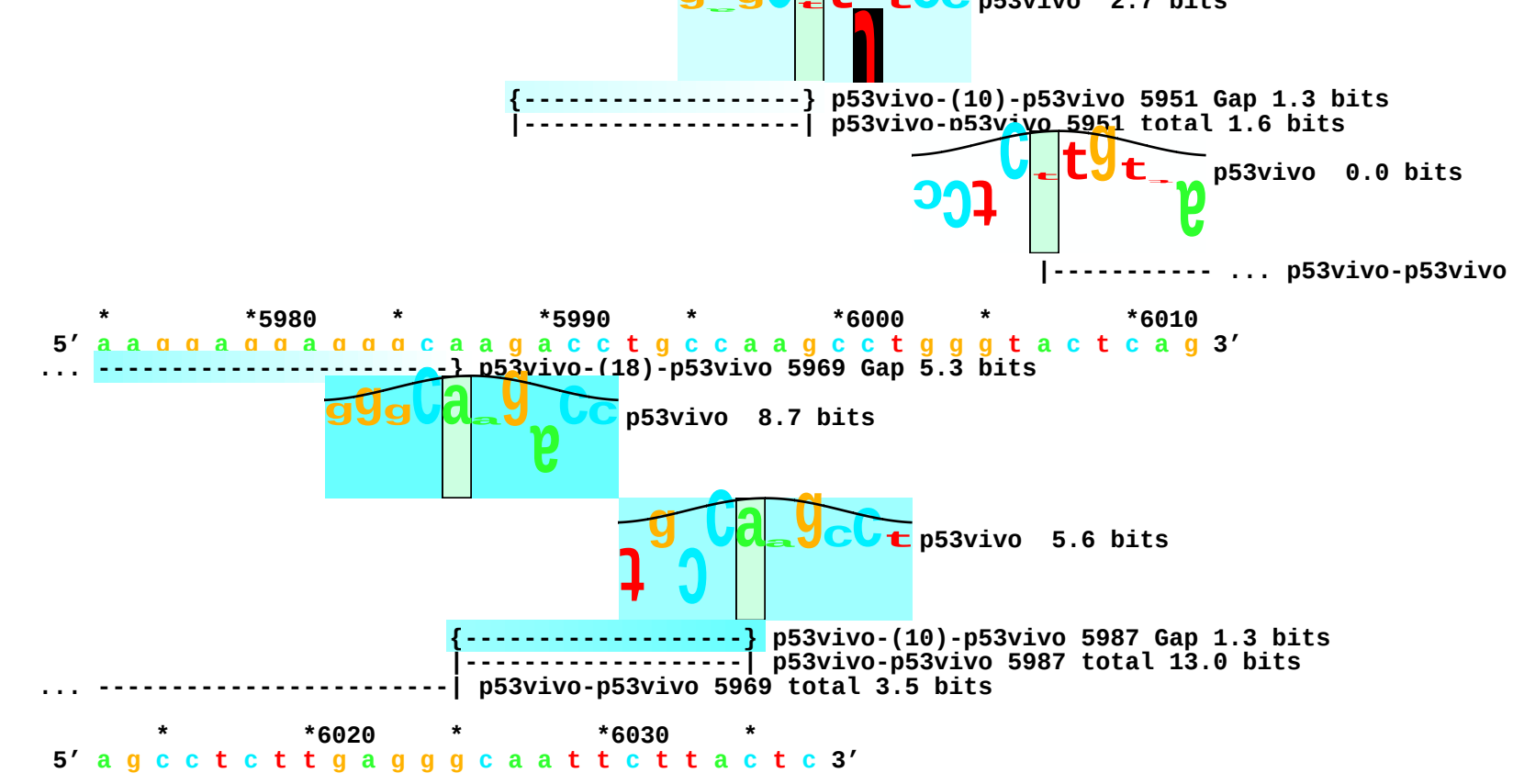
*970 * *980 * *990
5′ a g t c a c c a g c g t g c g c g g g a a g c t g 3′

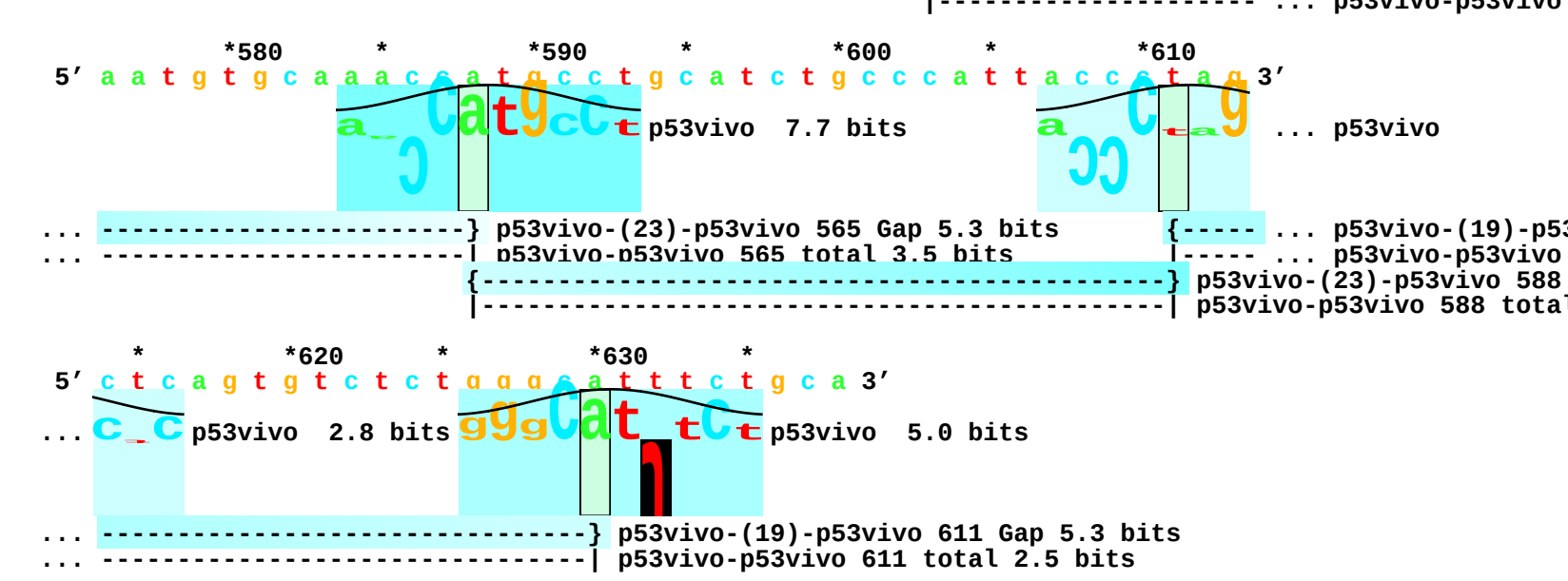
{------------------} p53vivo-(10)-p53vivo 1038 Gap 1.3 bits
|------------------| p53vivo-p53vivo 1038 total 12.5 bits

```
     *         *1070     *         *1080     *
5' t t c a g g a g t c a a a g a g g c g g g g a g a 3'
```

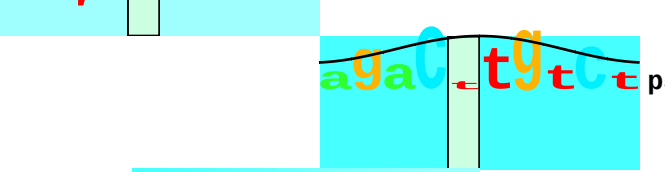

p53vivo 8.5 bits
{---------- p53vivo-(18)-p53vivo 280 Gap 5.3 bits
|---------- p53vivo-p53vivo 280 total 3.5 bits
p53vivo 5.8 bits
{---------- p53vivo-(10)-p53vivo 288 Gap 1.3 bits
|---------- p53vivo-p53vivo 288 total 13.0 bits
{---------- ... p53vivo-(19)-p53
|---------- ... p53vivo-p53vivo
* *320 * *330 *
5′ a a c g g g a c c g t a g c g t c a c g c g g g g 3′
p53vivo 0.7 bits
... ------} p53vivo-(19)-p53vivo 298 Gap 5.3 bits
... ------| p53vivo-p53vivo 298 total 4.0 bits


p53vivo 7.4 bits
{----------} p53vivo-(11)-p53vivo 5068 Gap 2.9 bits
|----------| p53vivo-p53vivo 5068 total 11.3 bits
* *5100 * *5110 *
5’ t g a g c c c c t g a g g c a a a a c g c t t t g 3’


p53vivo 2.7 bits
{------------------} p53vivo-(10)-p53vivo 5951 Gap 1.3 bits
|------------------| p53vivo-p53vivo 5951 total 1.6 bits
p53vivo 0.0 bits
|---------- ... p53vivo-p53vivo
* *5980 * *5990 * *6000 * *6010
5′ a a g g a g g a g g g c a a g a c c t g c c a a g c c t g g g t a c t c a g 3′
... ----------------------} p53vivo-(18)-p53vivo 5969 Gap 5.3 bits
p53vivo 8.7 bits
p53vivo 5.6 bits
{------------------} p53vivo-(10)-p53vivo 5987 Gap 1.3 bits
|------------------| p53vivo-p53vivo 5987 total 13.0 bits
... ----------------------| p53vivo-p53vivo 5969 total 3.5 bits
* *6020 * *6030 *
5′ a g c c t c t t g a g g g c a a t t c t t a c t c 3′

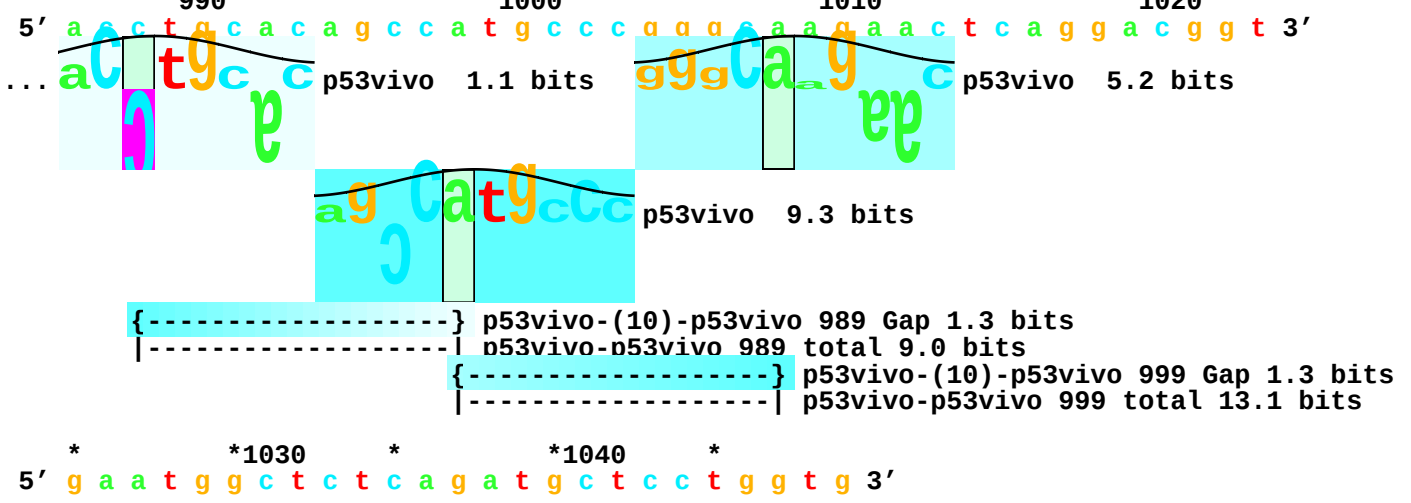

*580
*590
*600
*610
5′ a a t g t g c a a a c c a t g c c t g c a t c t g c c c a t t a c c c t a g 3′
p53vivo 7.7 bits
... p53vivo
... p53vivo-(23)-p53vivo 565 Gap 5.3 bits
... p53vivo-p53vivo 565 total 3.5 bits
... p53vivo-(19)-p53
... p53vivo-p53vivo
p53vivo-(23)-p53vivo 588
p53vivo-p53vivo 588 total
*620
*630
5′ c t c a g t g t c t c t g g g c a t t t c t g c a 3′
... p53vivo 2.8 bits
p53vivo 5.0 bits
... p53vivo-(19)-p53vivo 611 Gap 5.3 bits
... p53vivo-p53vivo 611 total 2.5 bits

p53vivo 0.8 bits
{-------------------------} p53vivo-(13)-p53vivo 44 Gap 4.3 bits
|-------------------------| p53vivo-p53vivo 44 total 1.0 bits
*80
*
*90
5’ c g c a g c g c c t c c g c c c c c 3’



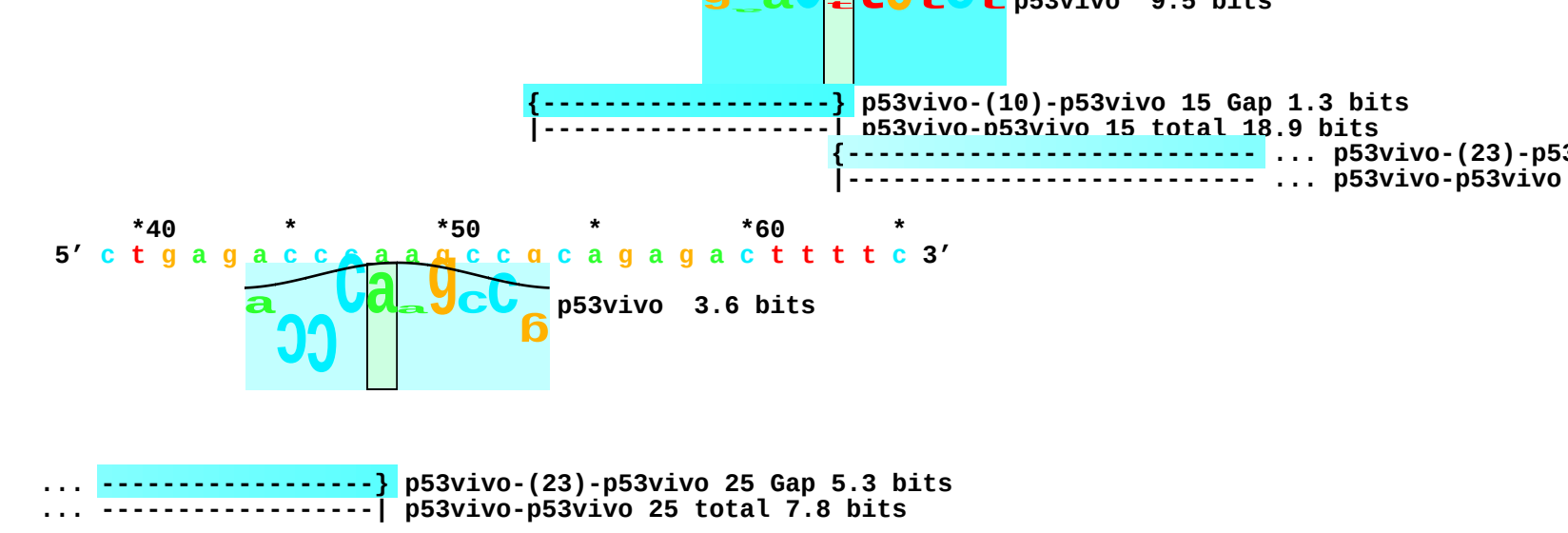
{------------------} p53vivo-(10)-p53vivo 121 Gap 1.3 bits
|------------------| p53vivo-p53vivo 121 total 15.0 bits

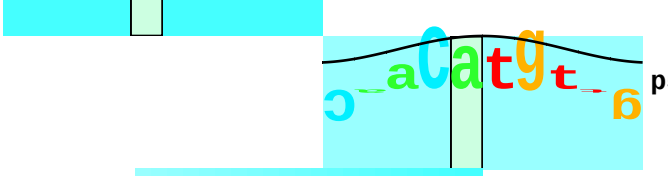
*150 * *160 * *170
5′ g g c t c a a a c a a t c c a c c c a c c t c g g 3′


990
1000
1010
1020
5′ a c c t g c a c a g c c a t g c c c g g g c a a g a a c t c a g g a c g g t 3′
... p53vivo 1.1 bits
p53vivo 5.2 bits
p53vivo 9.3 bits
{------------------} p53vivo-(10)-p53vivo 989 Gap 1.3 bits
|------------------| p53vivo-p53vivo 989 total 9.0 bits
{------------------} p53vivo-(10)-p53vivo 999 Gap 1.3 bits
|------------------| p53vivo-p53vivo 999 total 13.1 bits
* *1030 * *1040 *
5′ g a a t g g c t c t c a g a t g c t c c t g g t g 3′

{------------------} p53vivo-(10)-p53vivo 3836 Gap 1.3 bits
|------------------| p53vivo-p53vivo 3836 total 16.6 bits

```
        *         *3870     *         *3880     *
5’ g c a g c g g a a g a g a t c c c t g t g a g t c 3’
```

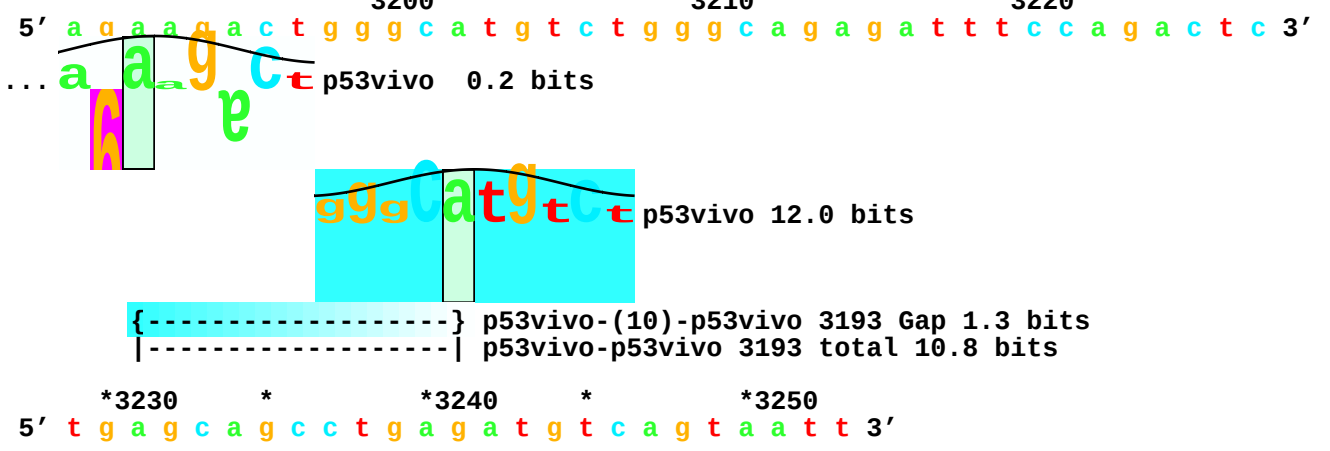

p53vivo 9.5 bits
{------------------} p53vivo-(10)-p53vivo 15 Gap 1.3 bits
|------------------| p53vivo-p53vivo 15 total 18.9 bits
{--------------------------- ... p53vivo-(23)-p53
|--------------------------- ... p53vivo-p53vivo
*40 * *50 * *60 *
5’ c t g a g a c c c a a g c c a c a g a g a c t t t t c 3’
p53vivo 3.6 bits
... ------------------} p53vivo-(23)-p53vivo 25 Gap 5.3 bits
... ------------------| p53vivo-p53vivo 25 total 7.8 bits

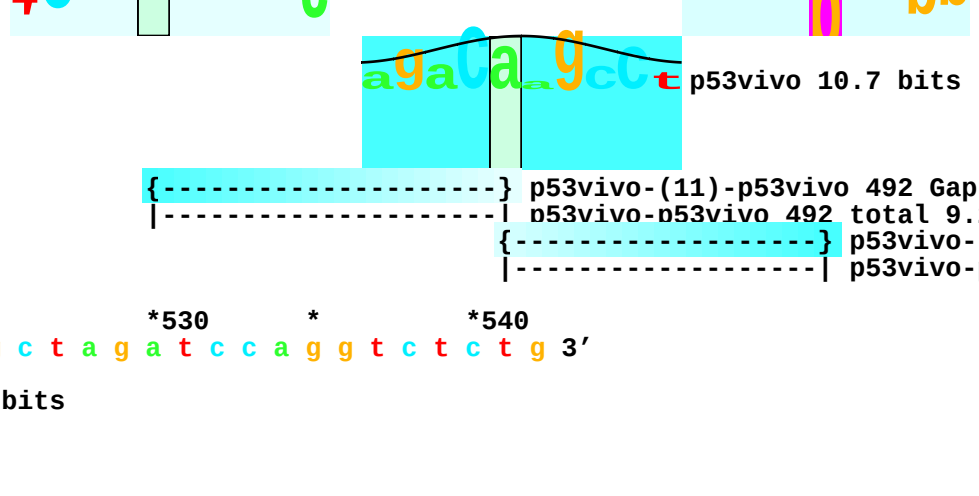


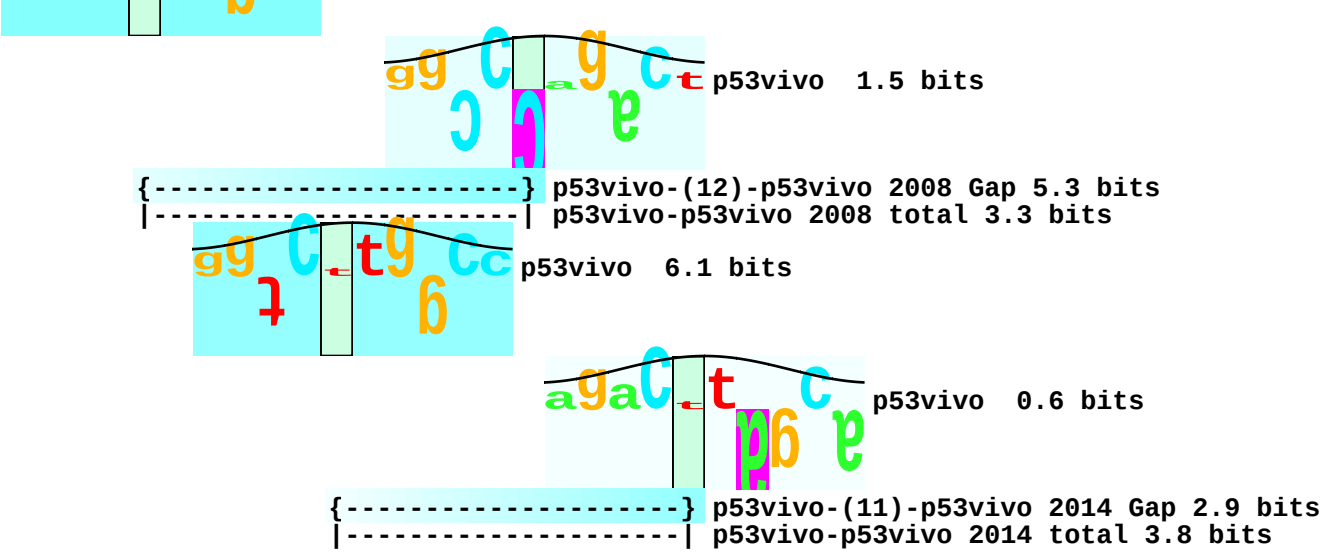
{------------------} p53vivo-(10)-p53vivo 2307 Gap 1.3 bits
|------------------| p53vivo-p53vivo 2307 total 15.4 bits

```
      *         *2340     *         *2350     *
5' t a g a a g a g g c t g g t g g c t a t t t t g t 3'
```

p53vivo 12.0 bits
{------------------} p53vivo-(10)-p53vivo 3193 Gap 1.3 bits
|------------------| p53vivo-p53vivo 3193 total 10.8 bits
*
*3230
*
*3240
*
5’ g a c t c t g a g c a g c c t g a g a t g t c a g 3’

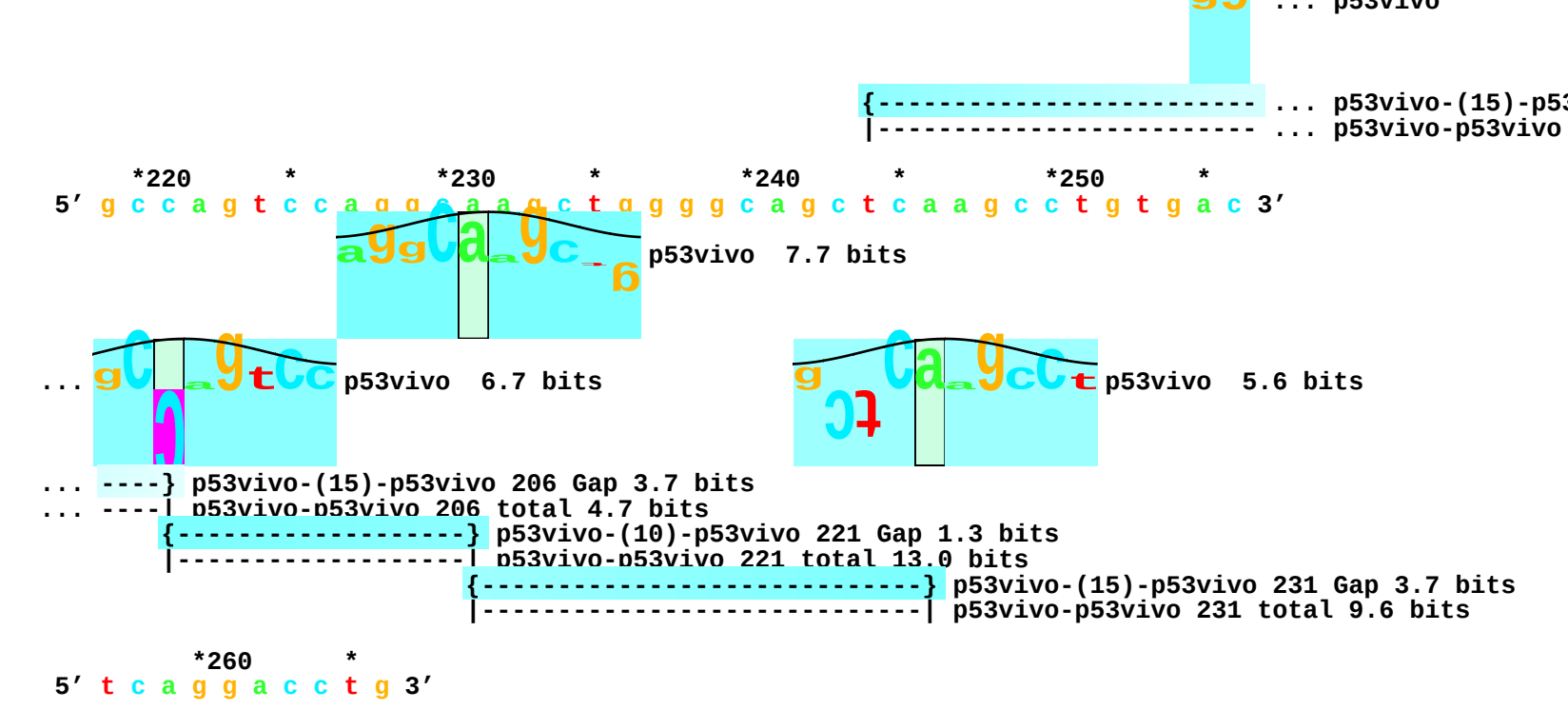

3200
3210
3220
5′ a g a a g a c t g g g c a t g t c t g g g c a g a g a t t t c c a g a c t c 3′
... p53vivo 0.2 bits
p53vivo 12.0 bits
{------------------} p53vivo-(10)-p53vivo 3193 Gap 1.3 bits
|------------------| p53vivo-p53vivo 3193 total 10.8 bits
*3230
*3240
*3250
5′ t g a g c a g c c t g a g a t g t c a g t a a t t 3′

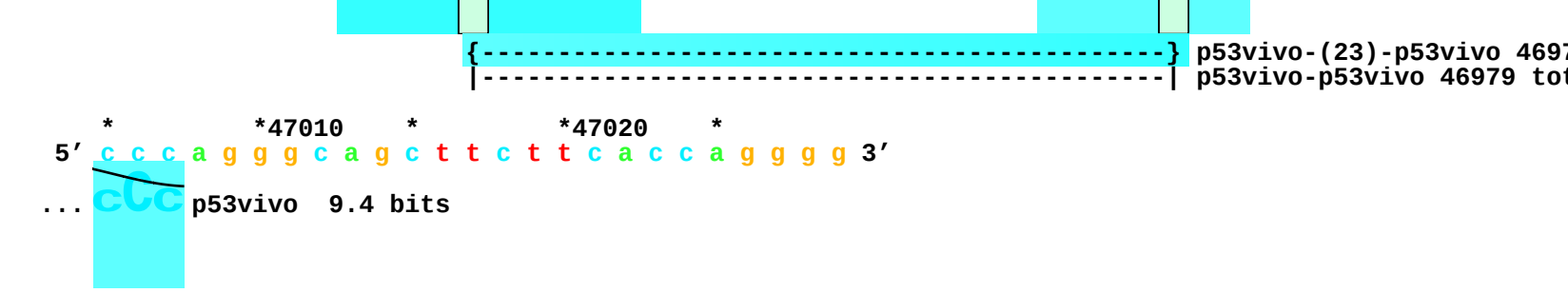

p53vivo 10.7 bits
{----------} p53vivo-(11)-p53vivo 492 Gap 2.9 bits
|----------| p53vivo-p53vivo 492 total 9.2 bits
{----------} p53vivo-(10)-p53vivo 503 Gap
|----------| p53vivo-p53vivo 503 total 11.
*520 * *530 * *540
5’ c t a t a t t g c t a g a t c c a g g t c t c t g 3’
... c p53vivo 2.2 bits

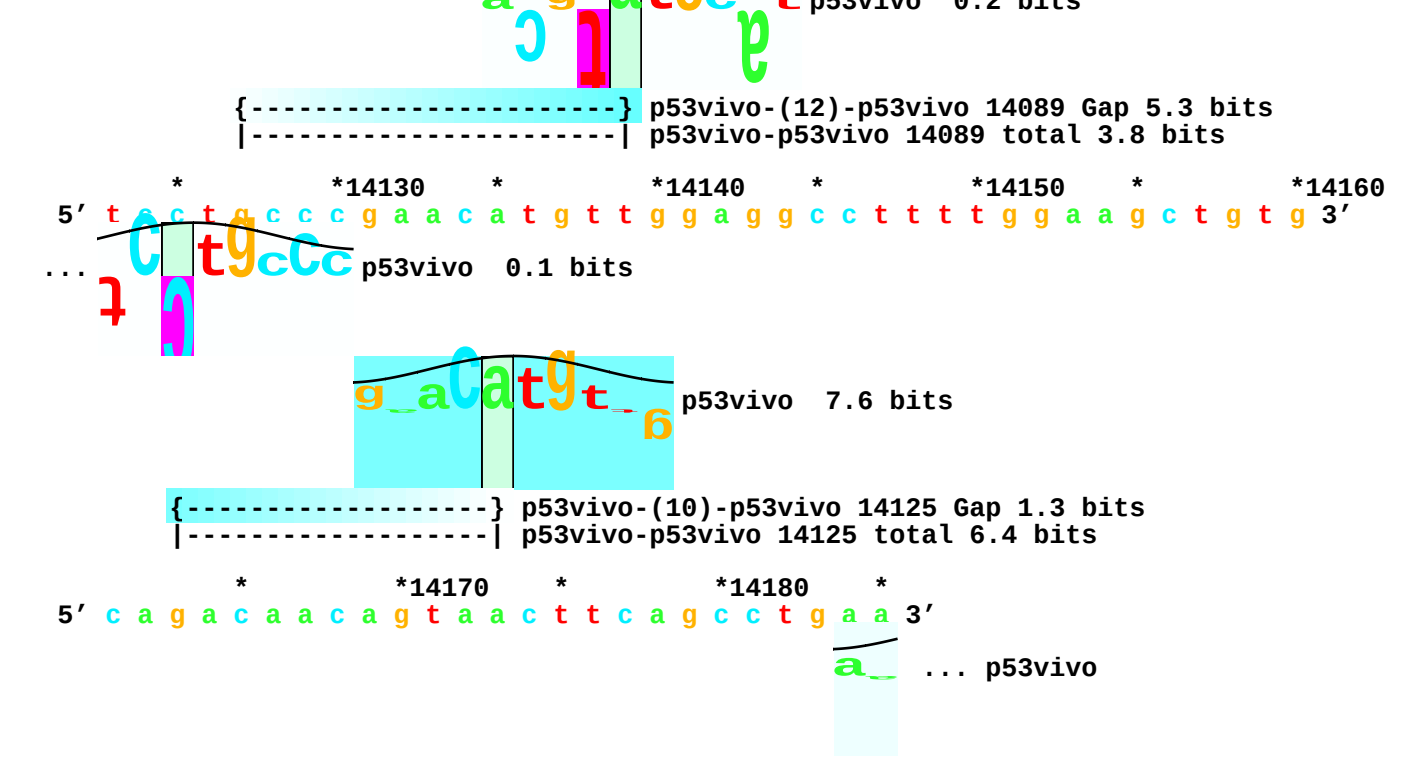


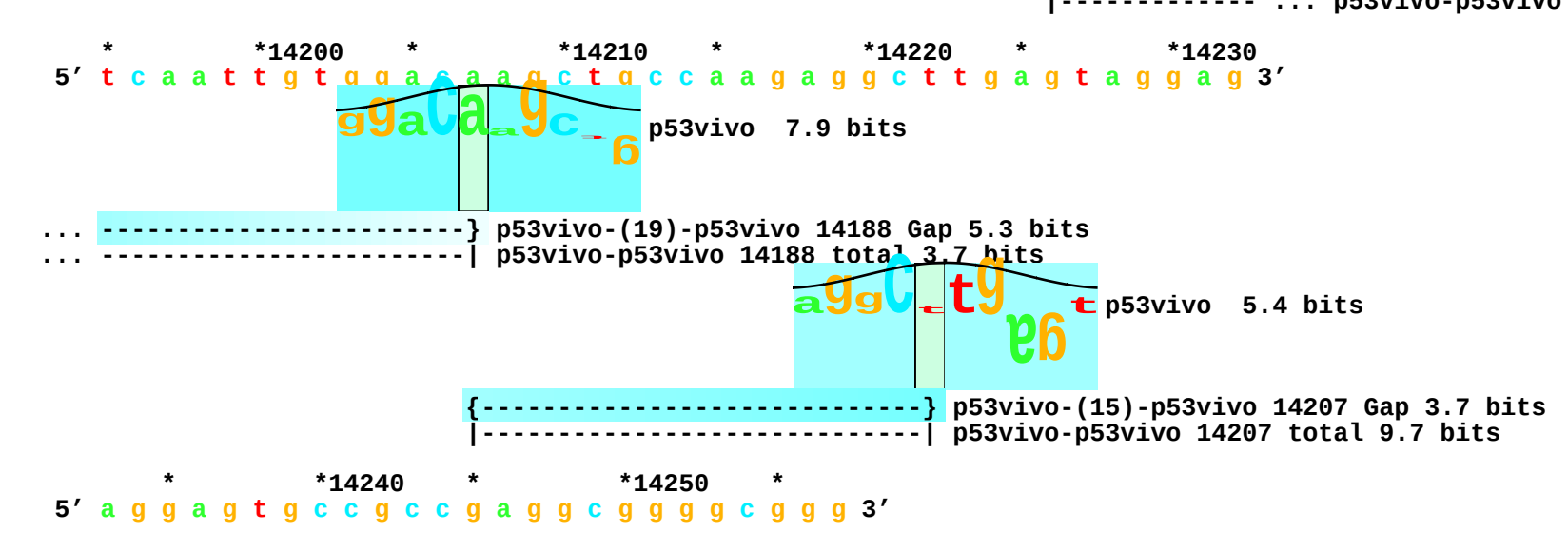
*2040 * *2050 * *2060

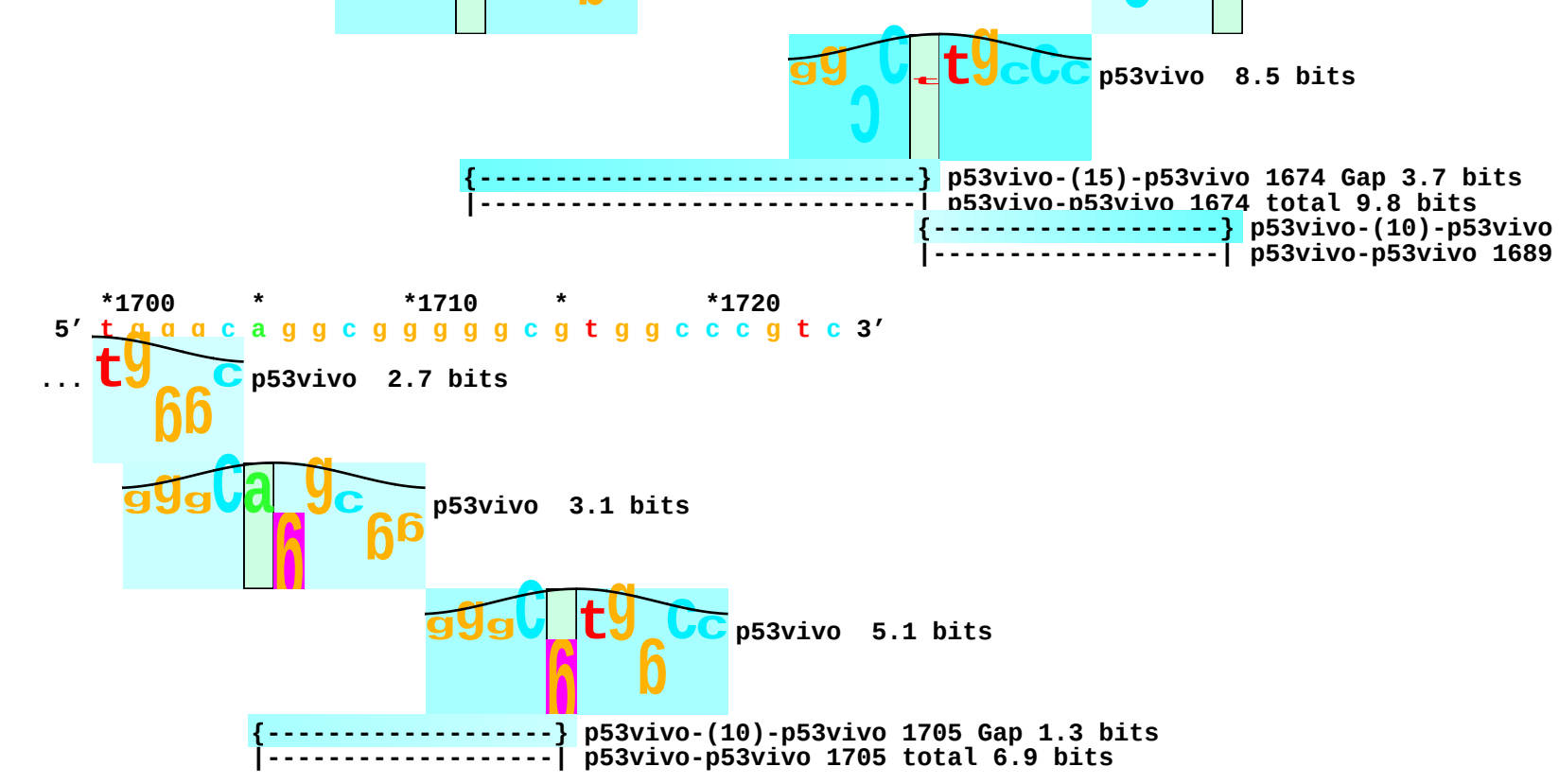
5′ c c c a c t c c c t g t t t t c c c c a t a g g g 3′

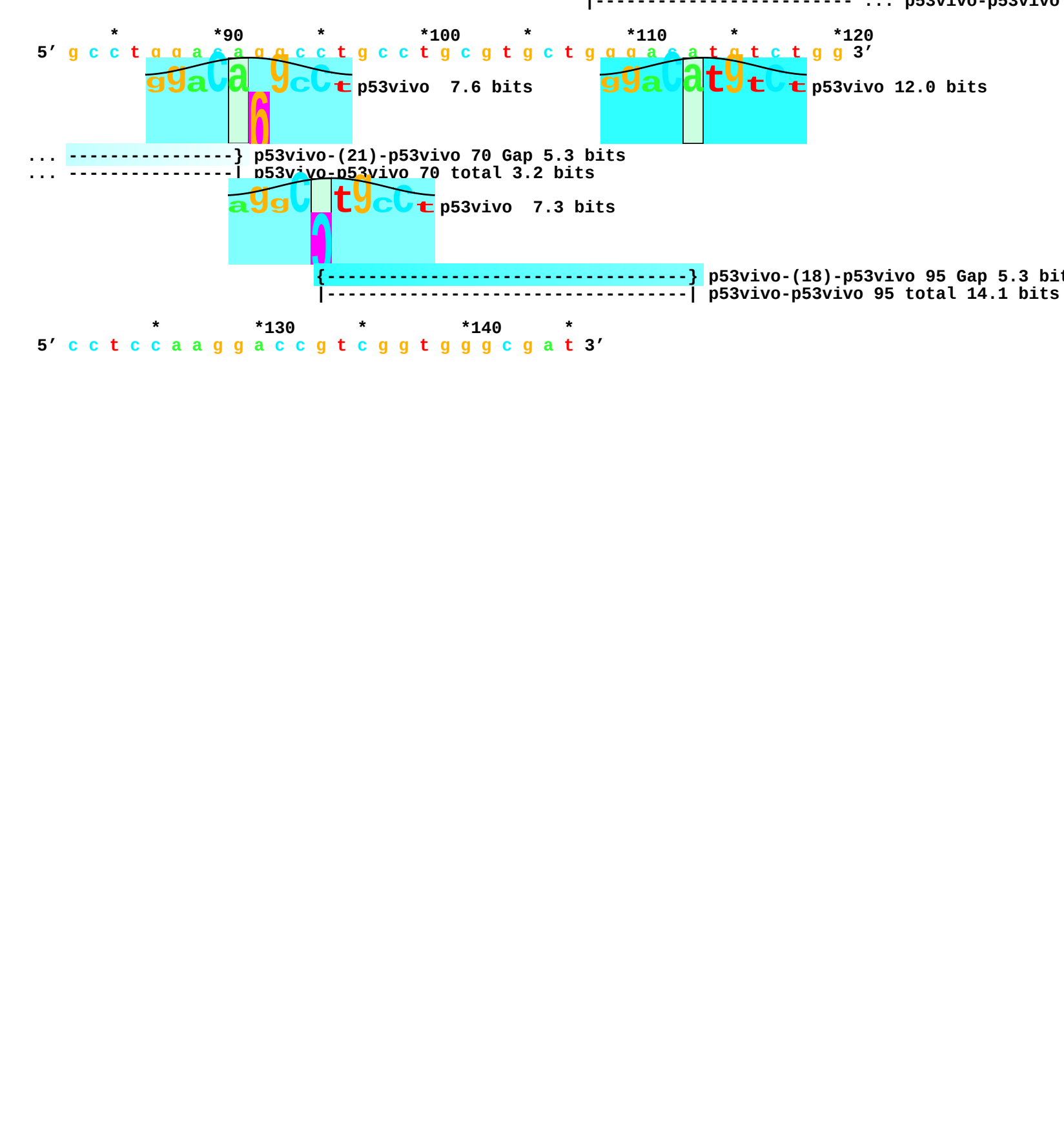

... p53vivo
... p53vivo-(15)-p53
... p53vivo-p53vivo
*220
*230
*240
*250
5' g c c a g t c c a g g c a a g c t g g g g c a g c t c a a g c c t g t g a c 3'
p53vivo 7.7 bits
... p53vivo 6.7 bits
p53vivo 5.6 bits
... ----} p53vivo-(15)-p53vivo 206 Gap 3.7 bits
... ----| p53vivo-p53vivo 206 total 4.7 bits
{------------------} p53vivo-(10)-p53vivo 221 Gap 1.3 bits
|------------------| p53vivo-p53vivo 221 total 13.0 bits
{-----------------------------} p53vivo-(15)-p53vivo 231 Gap 3.7 bits
|-----------------------------| p53vivo-p53vivo 231 total 9.6 bits
*260
5' t c a g g a c c t g 3'

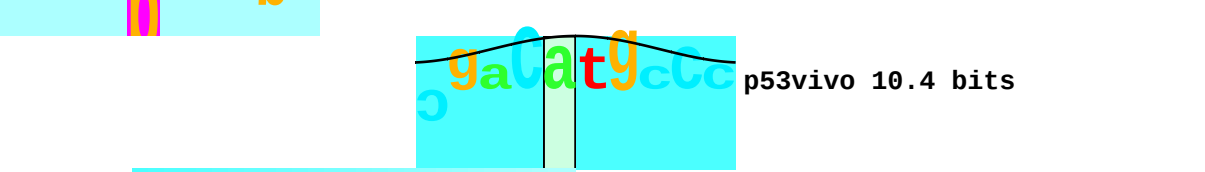

{----------} p53vivo-(23)-p53vivo 4697
|----------| p53vivo-p53vivo 46979 tot
* *47010 * *47020 *
5’ c c c a g g g c a g c t t c t t c a c c a g g g g 3’
... cCc p53vivo 9.4 bits


p53vivo 0.2 bits
{----------} p53vivo-(12)-p53vivo 14089 Gap 5.3 bits
|----------| p53vivo-p53vivo 14089 total 3.8 bits
* *14130 * *14140 * *14150 * *14160
5′ t c c t g c c c g a a c a t g t t g g a g g c c t t t t g g a a g c t g t g 3′
... p53vivo 0.1 bits
p53vivo 7.6 bits
{----------} p53vivo-(10)-p53vivo 14125 Gap 1.3 bits
|----------| p53vivo-p53vivo 14125 total 6.4 bits
* *14170 * *14180 *
5′ c a g a c a a c a g t a a c t t c a g c c t g a a 3′
... p53vivo


|------------ ... p53vivo-p53vivo
*
*14200
*
*14210
*
*14220
*
*14230
5′ t c a a t t g t g g a c a a g c t g c c a a g a g g c t t g a g t a g g a g 3′
p53vivo 7.9 bits
... ----------} p53vivo-(19)-p53vivo 14188 Gap 5.3 bits
... ----------| p53vivo-p53vivo 14188 total 3.7 bits
p53vivo 5.4 bits
{----------} p53vivo-(15)-p53vivo 14207 Gap 3.7 bits
|----------| p53vivo-p53vivo 14207 total 9.7 bits
*
*14240
*
*14250
*
5′ a g g a g t g c c g c c g a g g c g g g g c g g g 3′

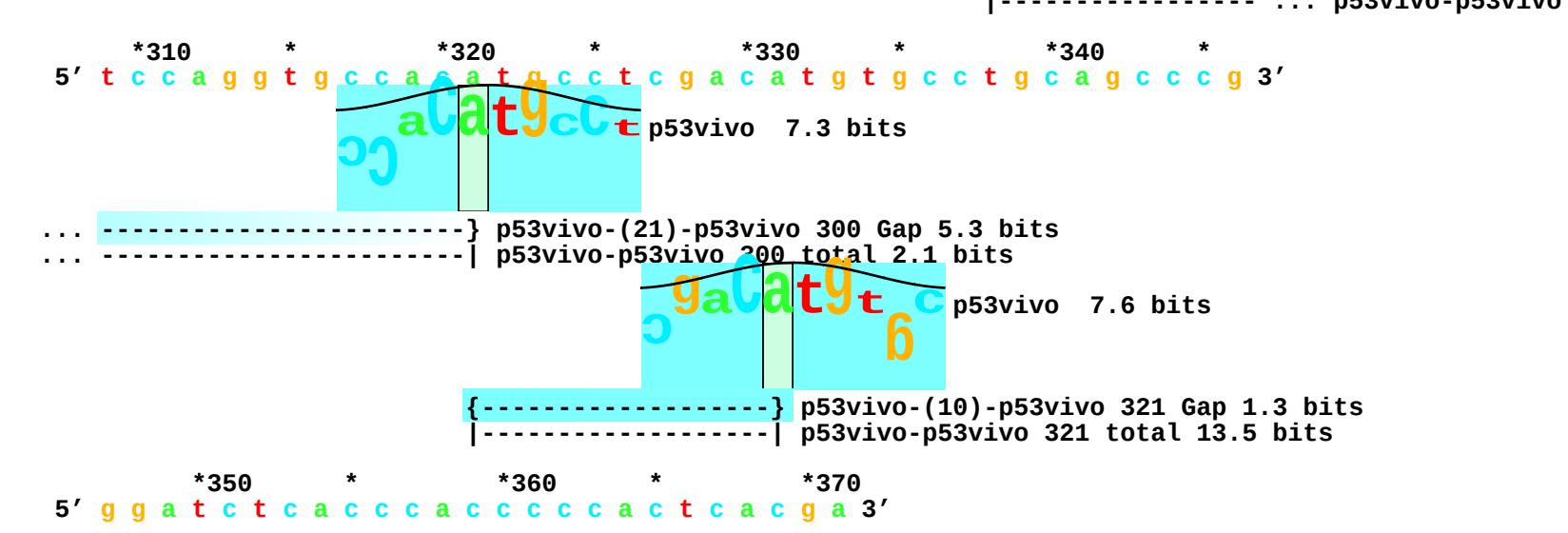

p53vivo 8.5 bits
{----------} p53vivo-(15)-p53vivo 1674 Gap 3.7 bits
|----------| p53vivo-p53vivo 1674 total 9.8 bits
{----------} p53vivo-(10)-p53vivo
|----------| p53vivo-p53vivo 1689
*1700
*1710
*1720
5′ t g g c a g g c g g g g g c g t g g c c c g t c 3′
... p53vivo 2.7 bits
p53vivo 3.1 bits
p53vivo 5.1 bits
{----------} p53vivo-(10)-p53vivo 1705 Gap 1.3 bits
|----------| p53vivo-p53vivo 1705 total 6.9 bits


|---------- ... p53vivo-p53vivo
* *90 * *100 * *110 * *120
5′ g c c t g g a c a g g c c t g c c t g c g t g c t g g g a c a t g t c t g g 3′
p53vivo 7.6 bits
p53vivo 12.0 bits
... ----------} p53vivo-(21)-p53vivo 70 Gap 5.3 bits
... ----------| p53vivo-p53vivo 70 total 3.2 bits
p53vivo 7.3 bits
{----------} p53vivo-(18)-p53vivo 95 Gap 5.3 bit
|----------| p53vivo-p53vivo 95 total 14.1 bits
* *130 * *140 *
5′ c c t c c a a g g a c c g t c g g t g g g c g a t 3′


p53vivo 10.4 bits
{------------------------} p53vivo-(13)-p53vivo 2727 Gap 4.3 bits
|------------------------| p53vivo-p53vivo 2727 total 11.0 bits
*
*2760
*
*2770
*
5’ c g c c a t t a a c c g c c a g a t t t g a a t c 3’

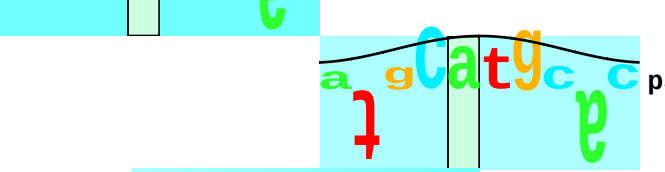
{------------------} p53vivo-(10)-p53vivo 663 Gap 1.3 bits
|------------------| p53vivo-p53vivo 663 total 9.6 bits

*690 * *700 * *710
5′ t c t a t c a t a t c c t c a a c a a g g a a t t 3′


|---------- ... p53vivo-p53vivo
*310 * *320 * *330 * *340 *
5′ t c c a g g t g c c a c a t g c c t c g a c a t g t g c c t g c a g c c c g 3′
p53vivo 7.3 bits
... ----------} p53vivo-(21)-p53vivo 300 Gap 5.3 bits
... ----------| p53vivo-p53vivo 300 total 2.1 bits
p53vivo 7.6 bits
{----------} p53vivo-(10)-p53vivo 321 Gap 1.3 bits
|----------| p53vivo-p53vivo 321 total 13.5 bits
*350 * *360 * *370
5′ g g a t c t c a c c c a c c c c c a c t c a c g a 3′

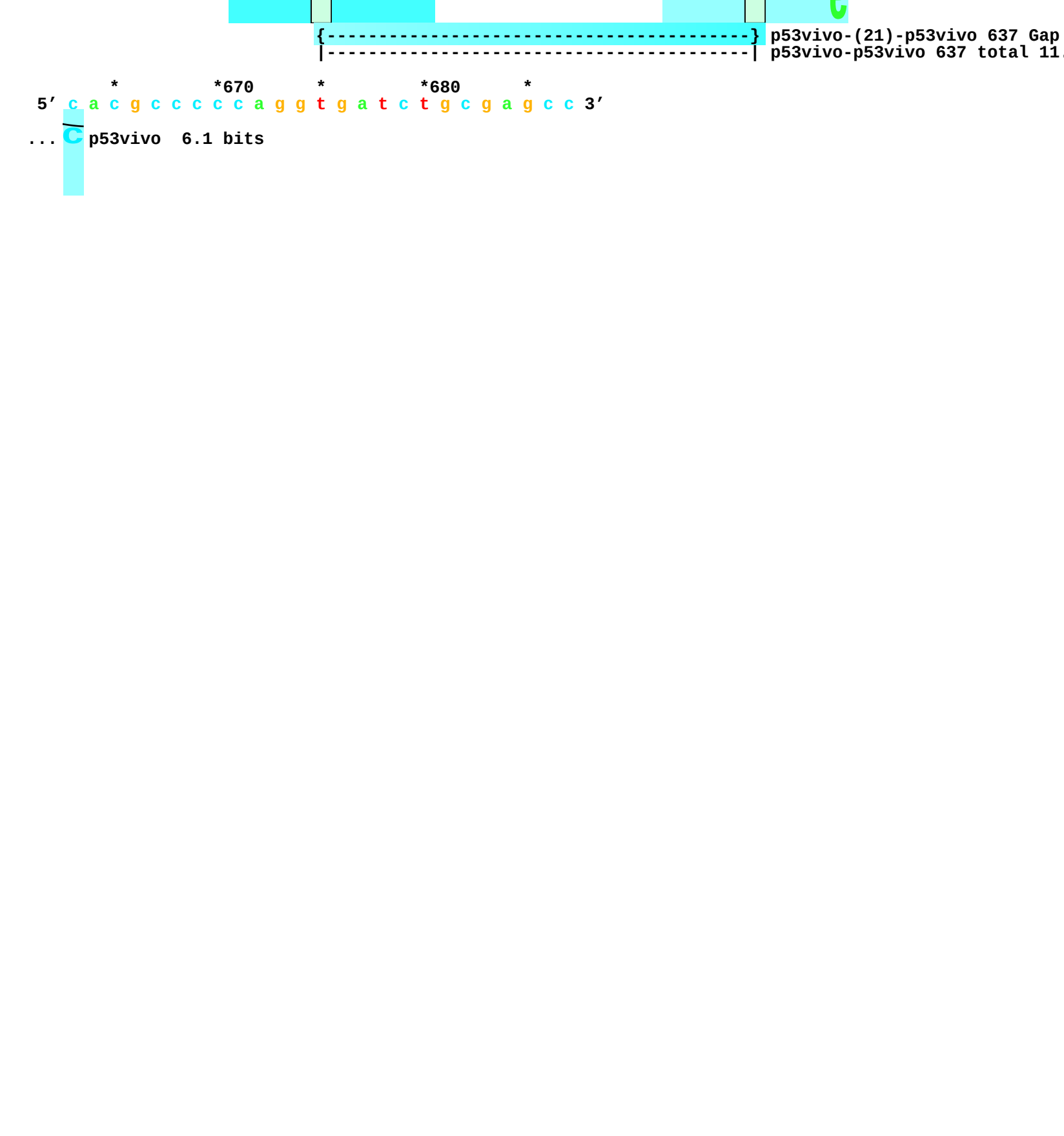
{------------------} p53vivo-(10)-p53vivo 2305 Gap 1.3 bits
|------------------| p53vivo-p53vivo 2305 total 14.7 bits

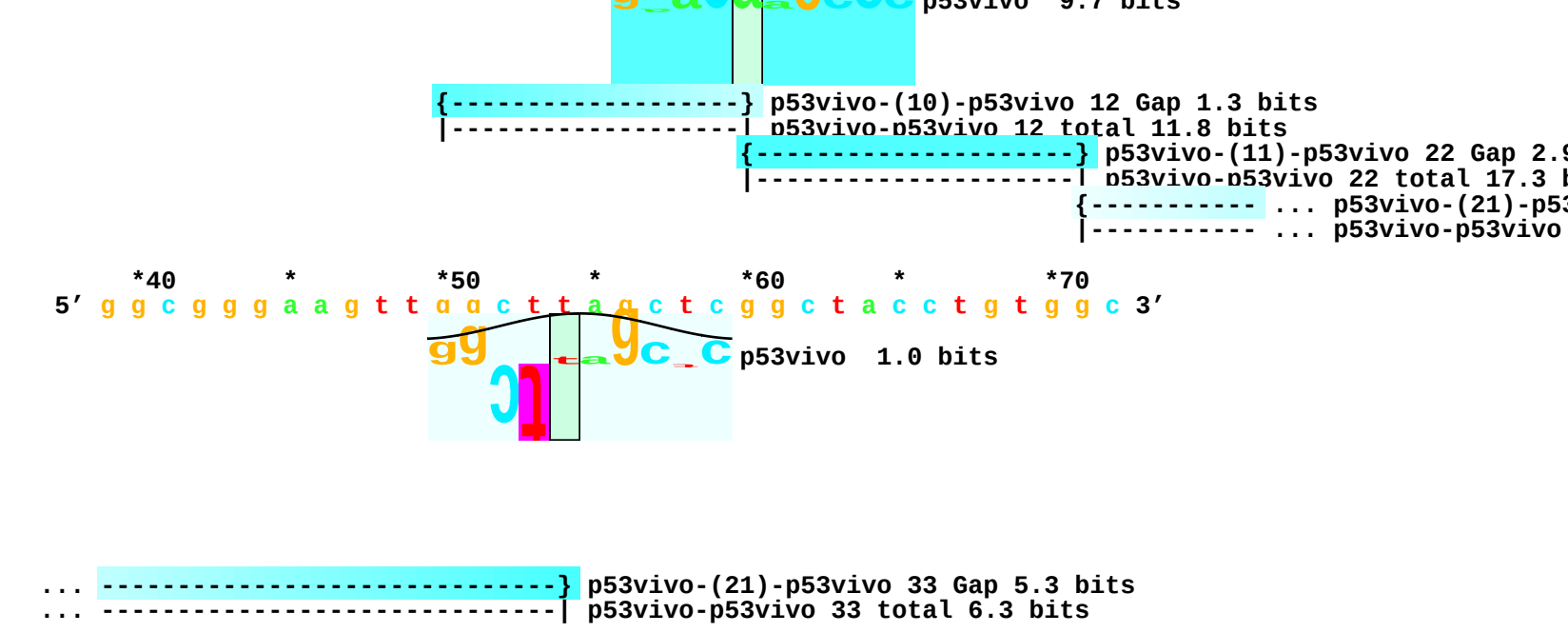
```
          *         *2340     *         *2350     *
5’ c c g g c t t a g g a g g a g c a c g c g t c c c 3’
```

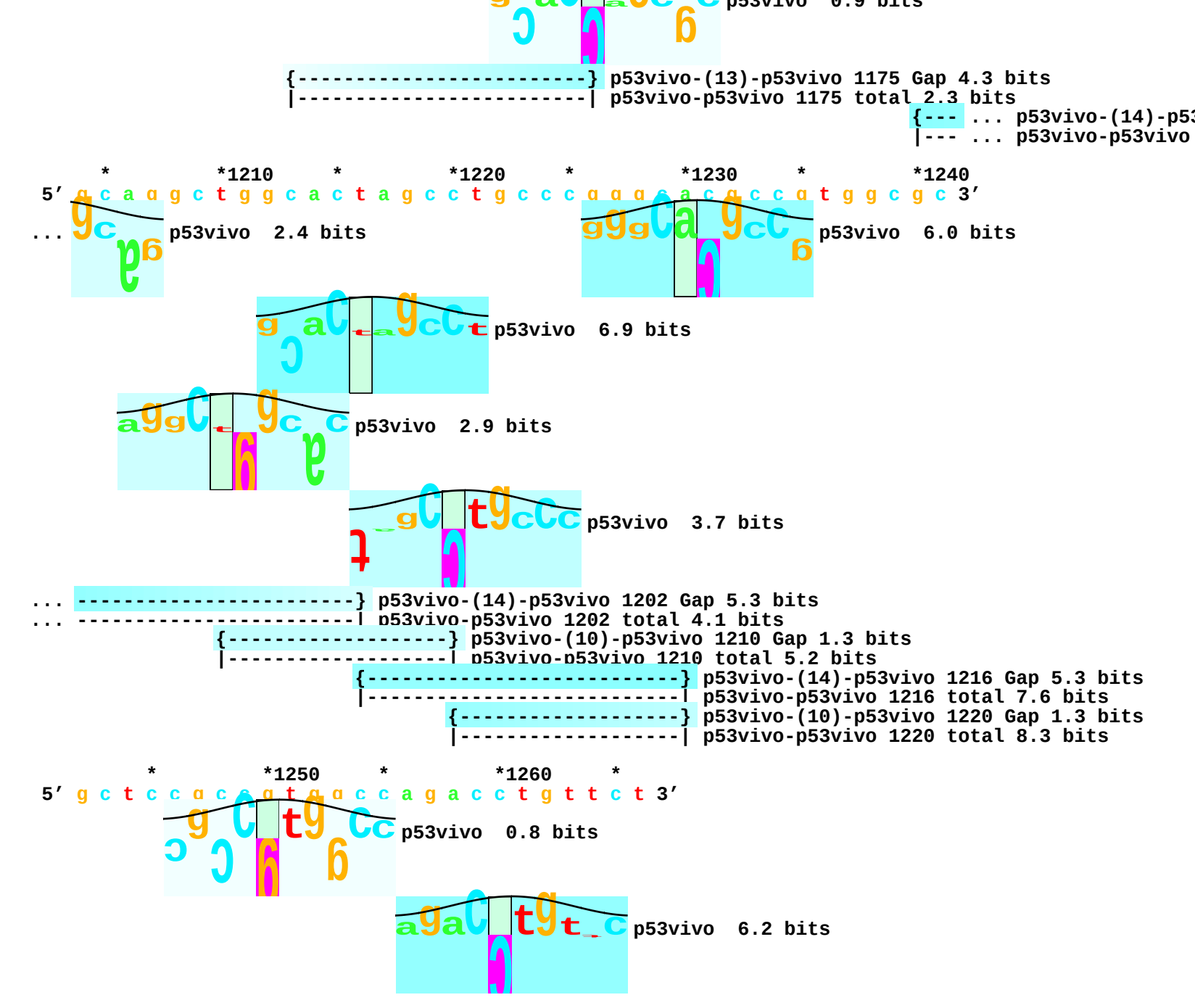


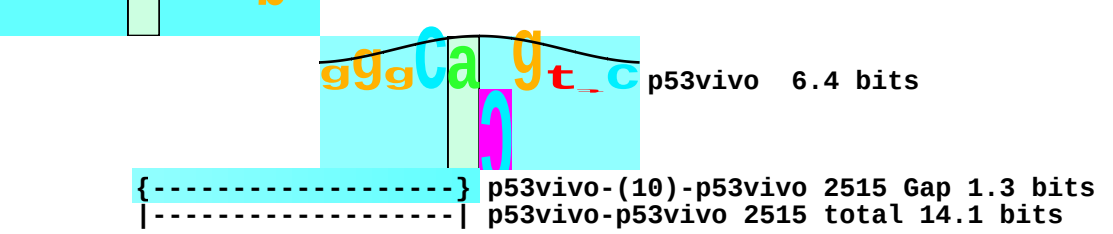
{------------------} p53vivo-(10)-p53vivo 1366 Gap 1.3 bits
|------------------| p53vivo-p53vivo 1366 total 11.6 bits

```
        *         *1400     *         *1410     *
5' t c c c a a t a c a t g t a c a g g c c c t g c c 3'
```

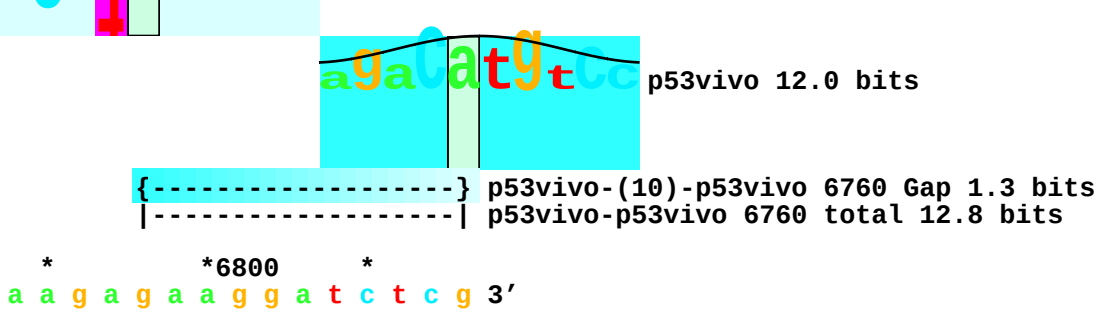

{----------} p53vivo-(21)-p53vivo 637 Gap
|----------| p53vivo-p53vivo 637 total 11
*
*670
*
*680
*
5’ c a c g c c c c c a g g t g a t c t g c g a g c c 3’
... c p53vivo 6.1 bits


p53vivo 9.7 bits
{------------------} p53vivo-(10)-p53vivo 12 Gap 1.3 bits
|------------------| p53vivo-p53vivo 12 total 11.8 bits
{--------------------} p53vivo-(11)-p53vivo 22 Gap 2.9
|--------------------| p53vivo-p53vivo 22 total 17.3 b
{----------- ... p53vivo-(21)-p53
|----------- ... p53vivo-p53vivo
*40 * *50 * *60 * *70
5' g g c g g g a a g t t g g c t t a g c t c g g c t a c c t g t g g c 3'
p53vivo 1.0 bits
... ------------------------------} p53vivo-(21)-p53vivo 33 Gap 5.3 bits
... ------------------------------| p53vivo-p53vivo 33 total 6.3 bits


p53vivo 0.9 bits
{------------------------} p53vivo-(13)-p53vivo 1175 Gap 4.3 bits
|------------------------| p53vivo-p53vivo 1175 total 2.3 bits
{--- ... p53vivo-(14)-p53
|--- ... p53vivo-p53vivo
* *1210 * *1220 * *1230 * *1240
5′ g c a g g c t g g c a c t a g c c t g c c c g g g c a c g c c g t g g c g c 3′
... p53vivo 2.4 bits
p53vivo 6.0 bits
p53vivo 6.9 bits
p53vivo 2.9 bits
p53vivo 3.7 bits
... ------------------------} p53vivo-(14)-p53vivo 1202 Gap 5.3 bits
... ------------------------| p53vivo-p53vivo 1202 total 4.1 bits
{------------------} p53vivo-(10)-p53vivo 1210 Gap 1.3 bits
|------------------| p53vivo-p53vivo 1210 total 5.2 bits
{--------------------------} p53vivo-(14)-p53vivo 1216 Gap 5.3 bits
|--------------------------| p53vivo-p53vivo 1216 total 7.6 bits
{------------------} p53vivo-(10)-p53vivo 1220 Gap 1.3 bits
|------------------| p53vivo-p53vivo 1220 total 8.3 bits
* *1250 * *1260 *
5′ g c t c c a c g t g a c c a g a c c t g t t c t 3′
p53vivo 0.8 bits
p53vivo 6.2 bits




```
          *         *2550     *         *2560     *
5’ g g t c a g c g c a a g c c g a g g g t c t t g g 3’
```


p53vivo 12.0 bits
{------------------} p53vivo-(10)-p53vivo 6760 Gap 1.3 bits
|------------------| p53vivo-p53vivo 6760 total 12.8 bits
*
*6790
*
*6800
*
5’ c c t t g t g g c a a a g a g a a g g a t c t c g 3’