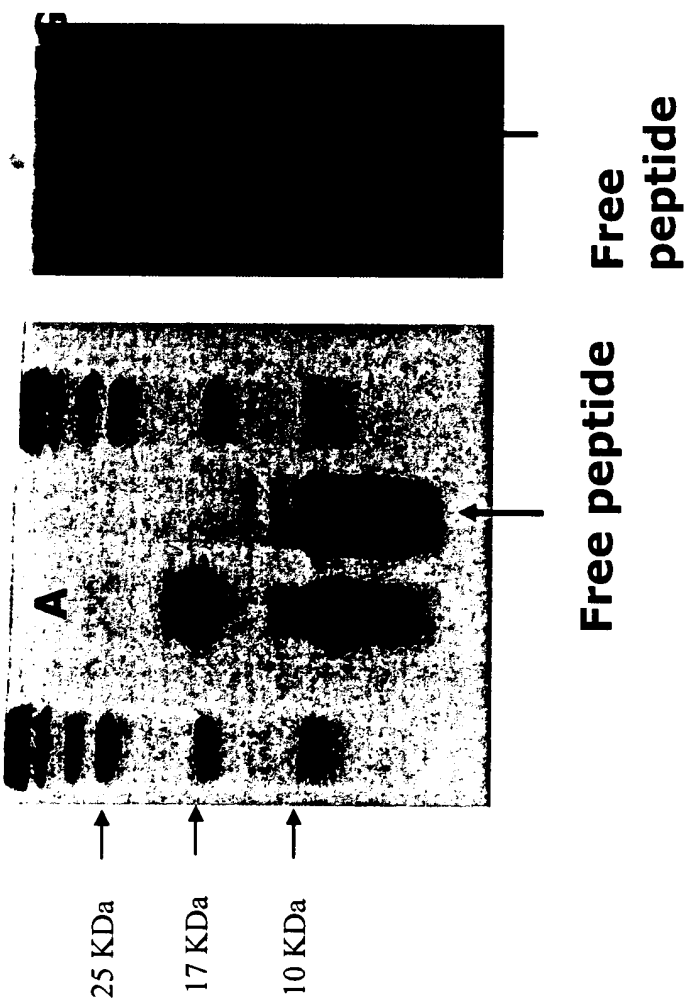

Coomassie
BaCl2/I2
A
B
Free peptide
Free peptide
25 KDa
17 KDa
10 KDa

Figure 1

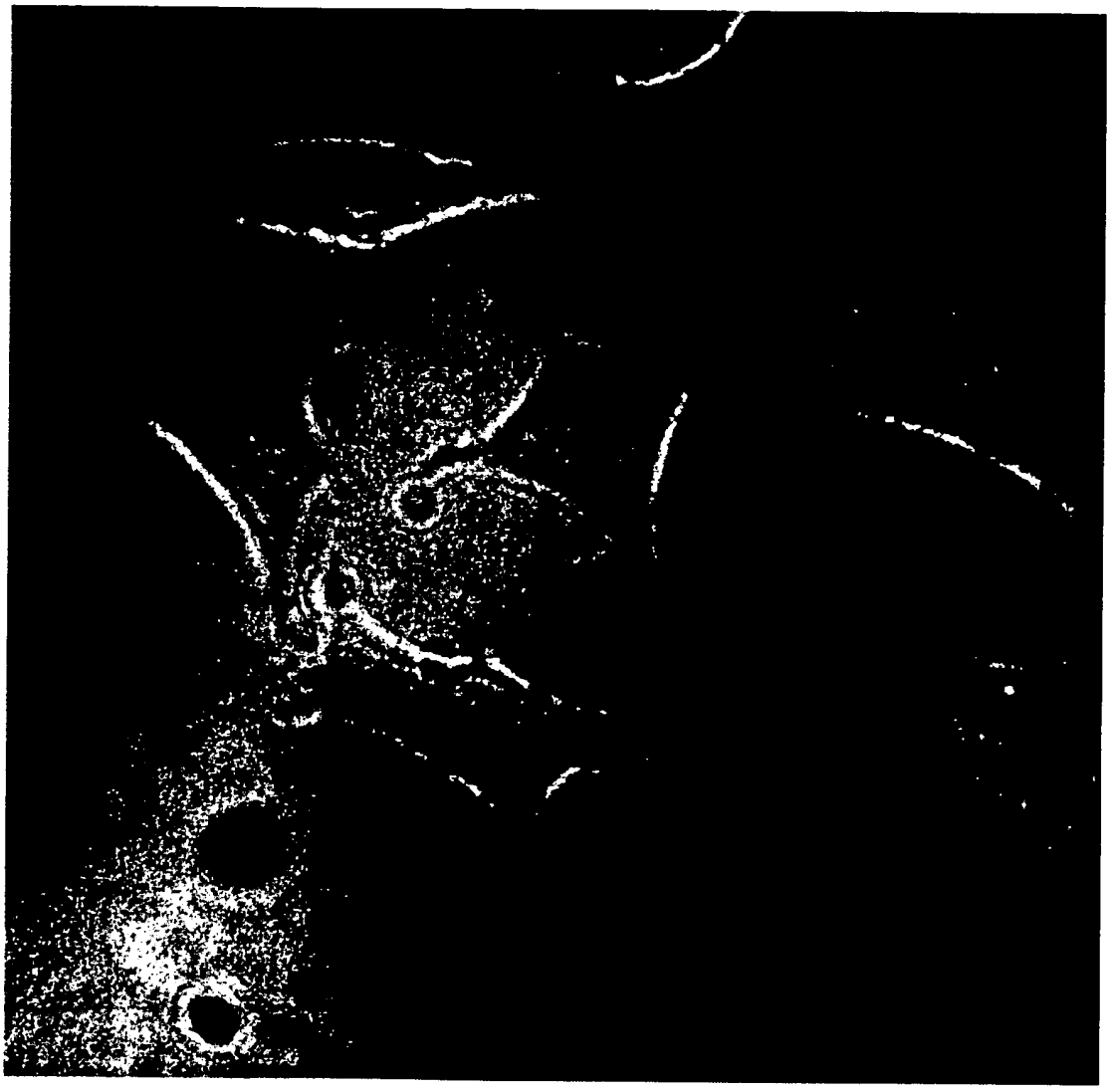
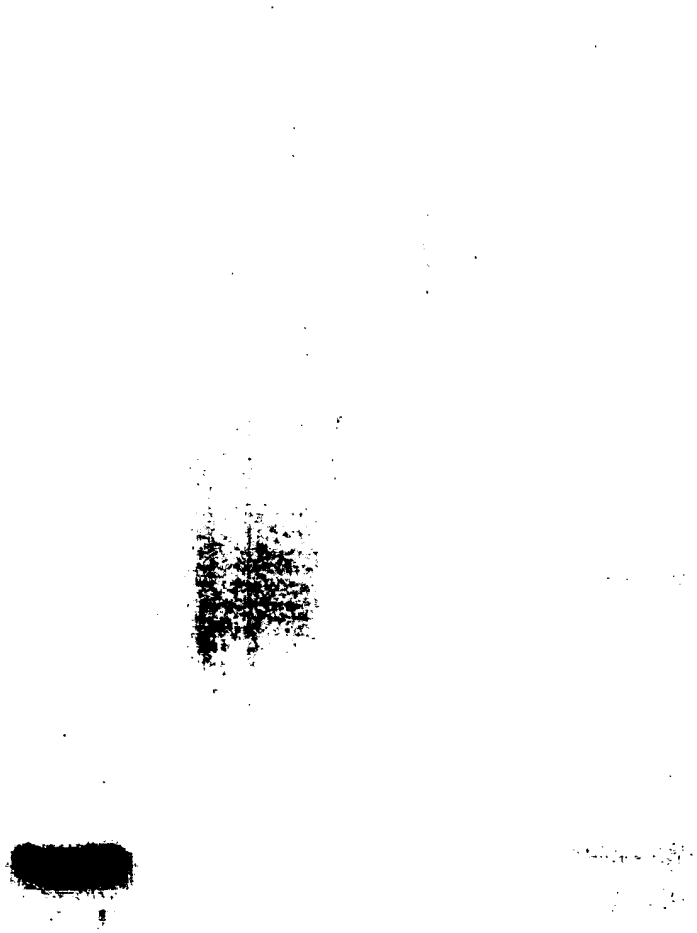


Figure 2



Figure 3



1. free RNA
2. RNA:PB19 (1:500) + Heparin
3. RNA:PB19 (1:500)
4. RNA Ladder

Figure 4

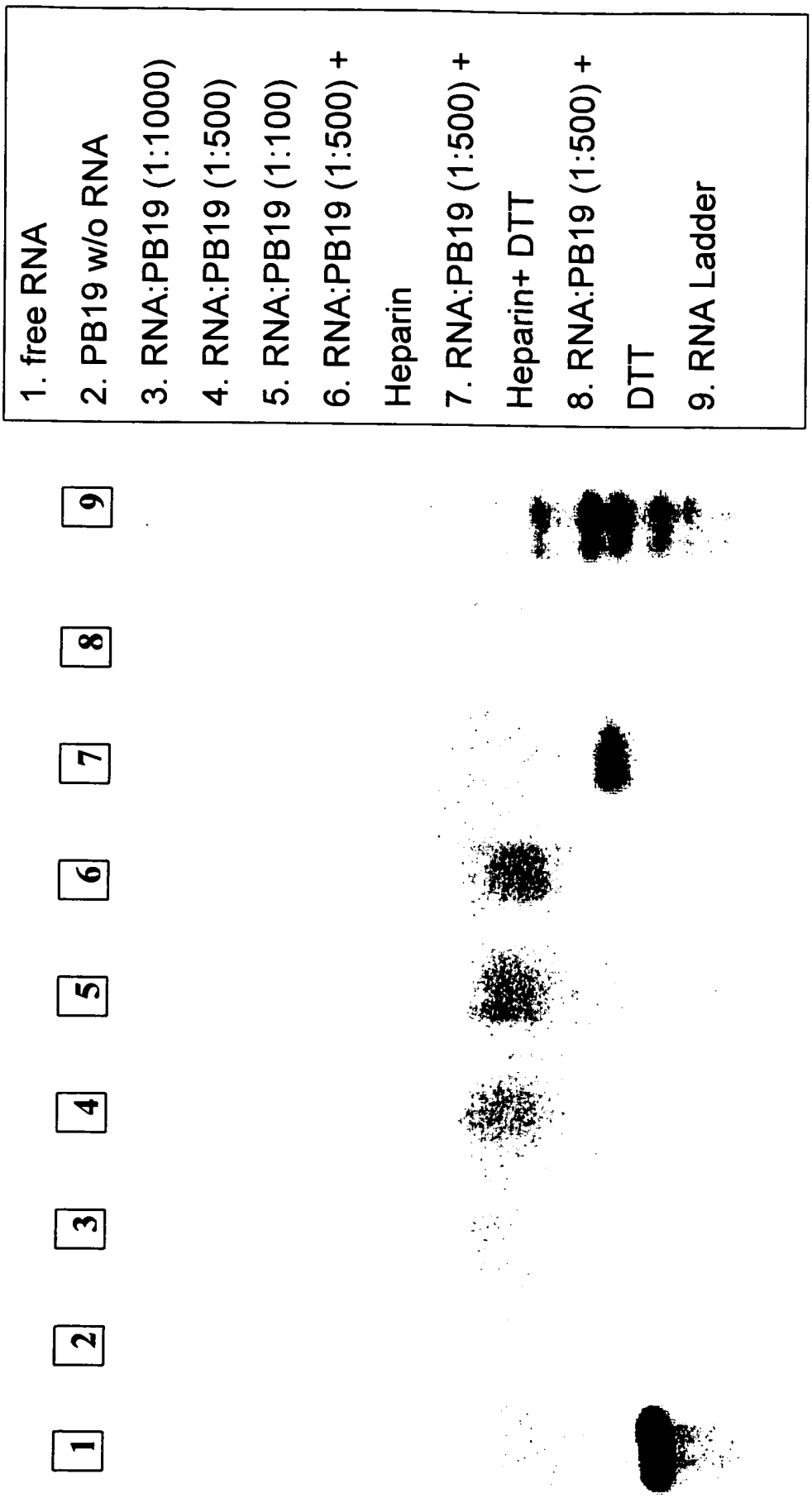
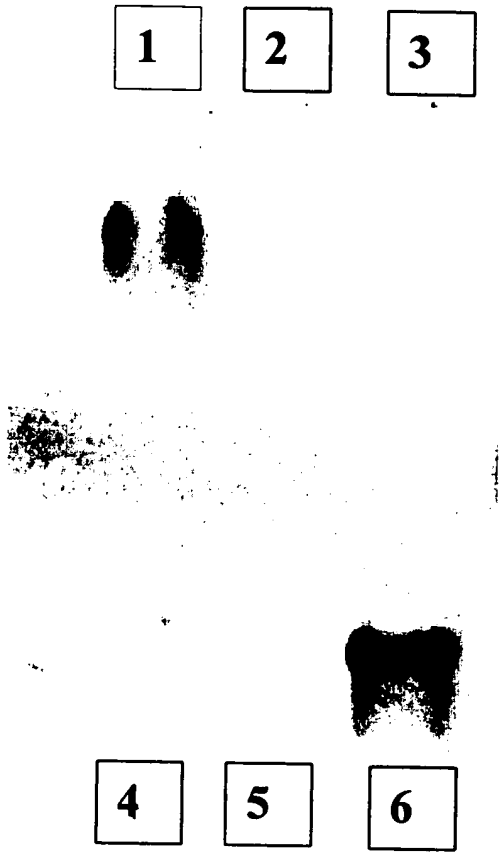

1. free RNA
2. PB19 w/o RNA
3. RNA:PB19 (1:1000)
4. RNA:PB19 (1:500)
5. RNA:PB19 (1:100)
6. RNA:PB19 (1:500) + Heparin
7. RNA:PB19 (1:500) + Heparin+ DTT
8. RNA:PB19 (1:500) + DTT
9. RNA Ladder
1
2
3
4
5
6
7
8
9

Figure 5



1. RNA:PB22 (1:250)
2. RNA: PEI (N/P 10)
3. free RNA
4. RNA:PB22 (1:250 + Heparin)
5. RNA:PEI (N/P10 + Heparin)
6. free RNA

Figure 6

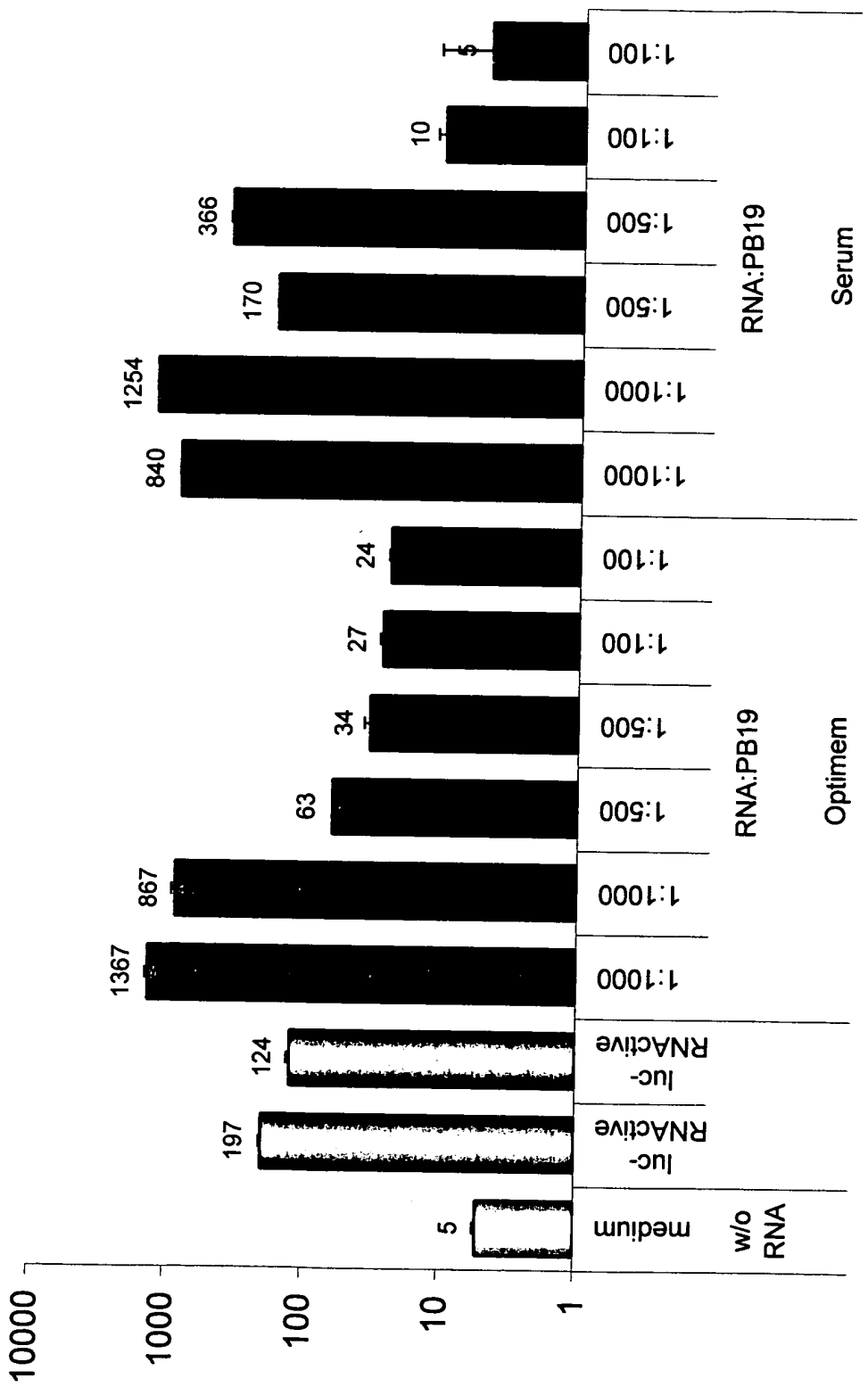

Effect of PB19 on the expression of luciferase in HeLa cells
10000
1000
100
10
1
w/o RNA
medium
luc-RNActive
luc-RNActive
RNA:PB19
Optimem
1:1000
1:1000
1:500
1:500
1:100
1:100
RNA:PB19
Serum
1:1000
1:1000
1:500
1:500
1:100
1:100
5
197
124
1367
867
63
34
27
24
840
1254
170
366
10
5

Figure 7

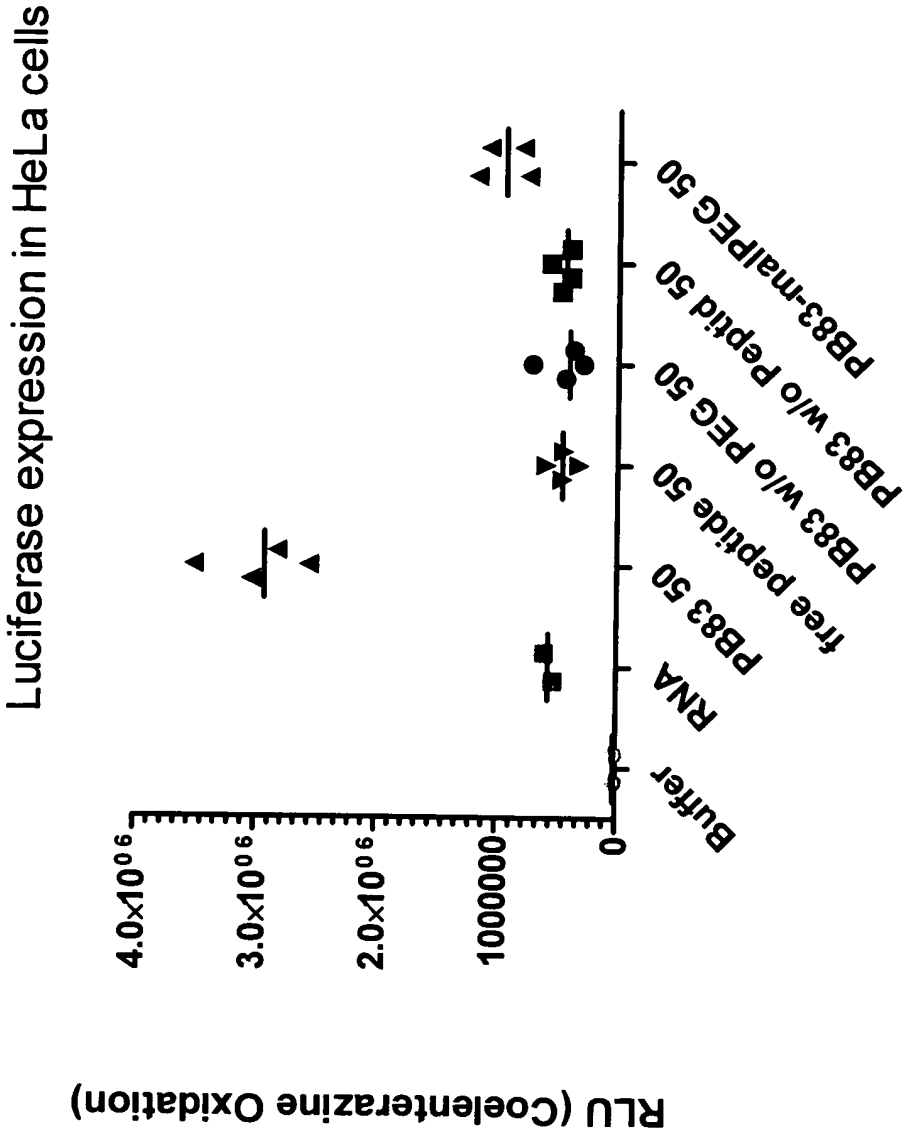

Luciferase expression in HeLa cells
RLU (Coelenterazine Oxidation)
4.0x10^6
3.0x10^6
2.0x10^6
1000000
0
Buffer
RNA
PB83 50
free peptide 50
PB83 w/o PEG 50
PB83 w/o Peptid 50
PB83-malPEG 50

Figure 8

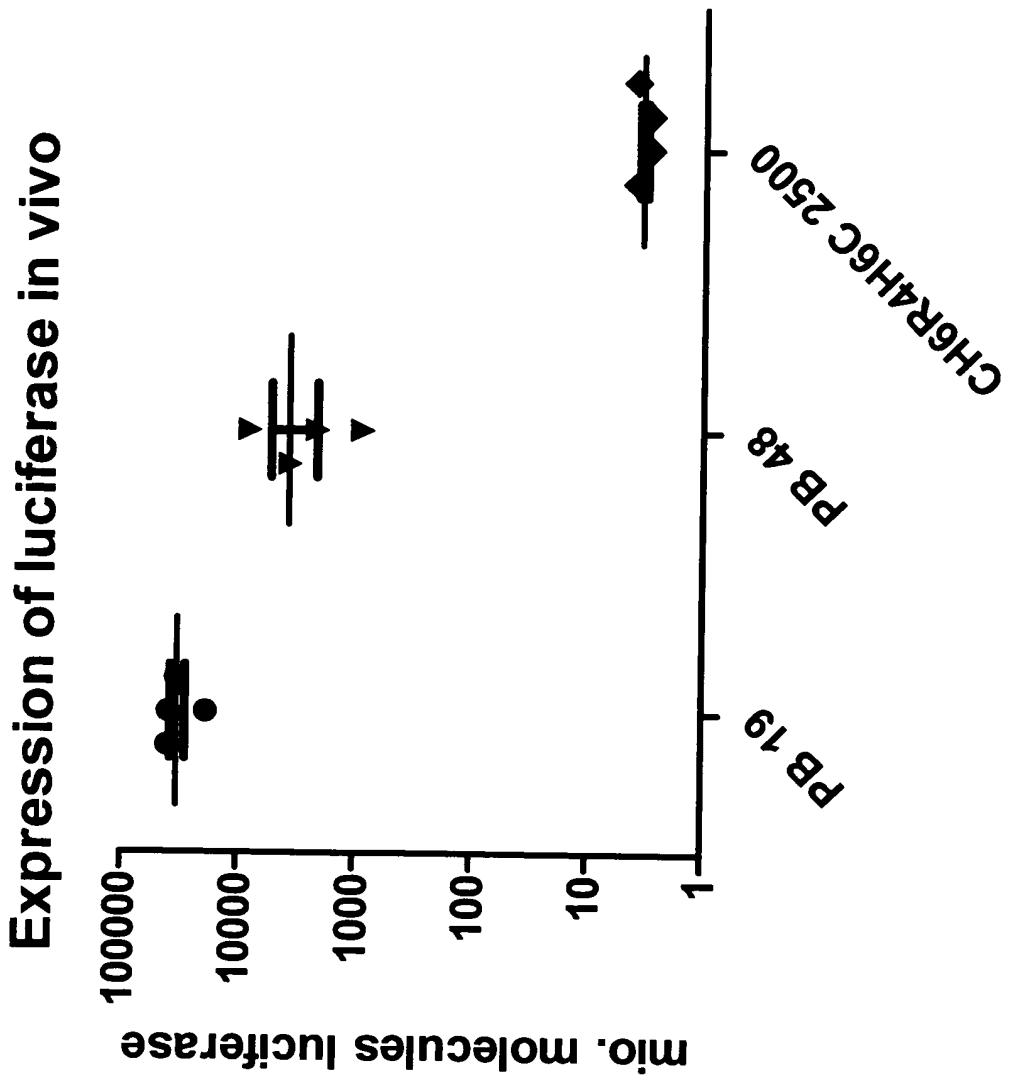

Expression of luciferase in vivo
mio. molecules luciferase
100000
10000
1000
100
10
1
PB 19
PB 48
CH6R4H6C 2500

Figure 10

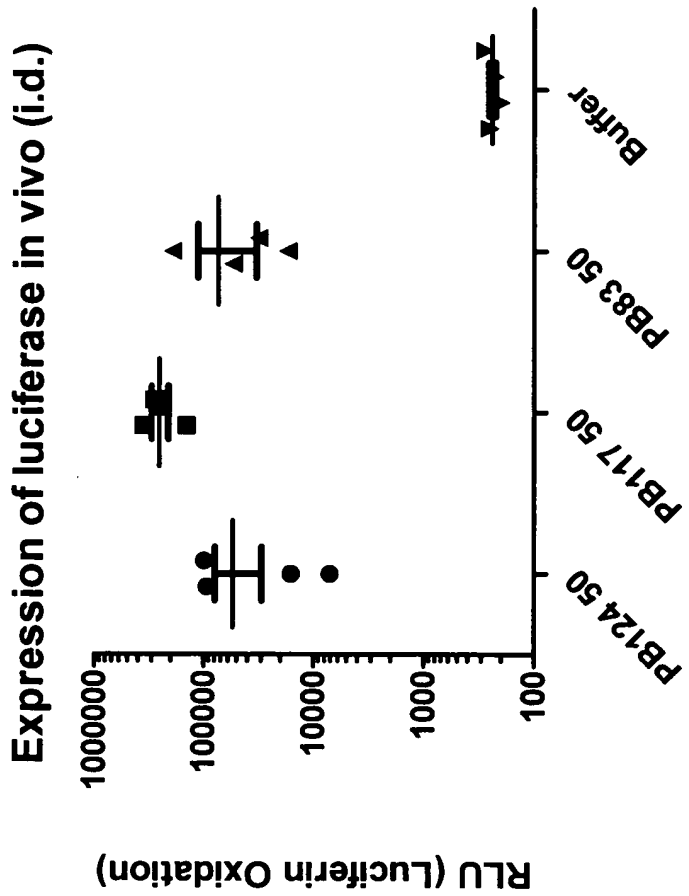

Expression of luciferase in vivo (i.d.)
RLU (Luciferin Oxidation)
1000000
100000
10000
1000
100
PB124 50
PB117 50
PB83 50
Buffer

Figure 11

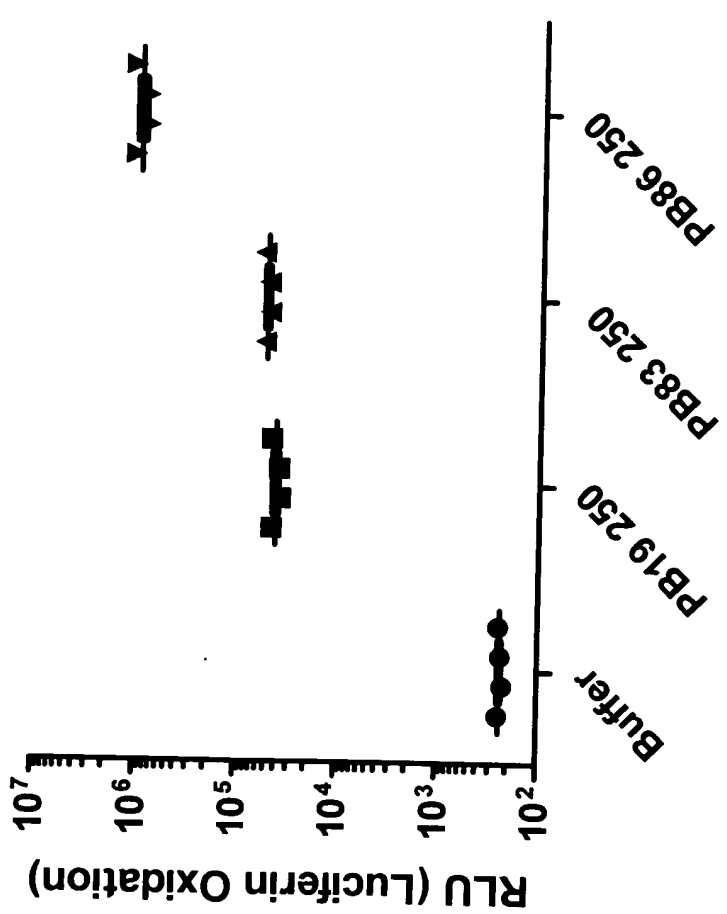

Luciferase expression in CHO cells
RLU (Luciferin Oxidation)
10^7
10^6
10^5
10^4
10^3
10^2
Buffer
PB19 250
PB83 250
PB86 250

Figure 12

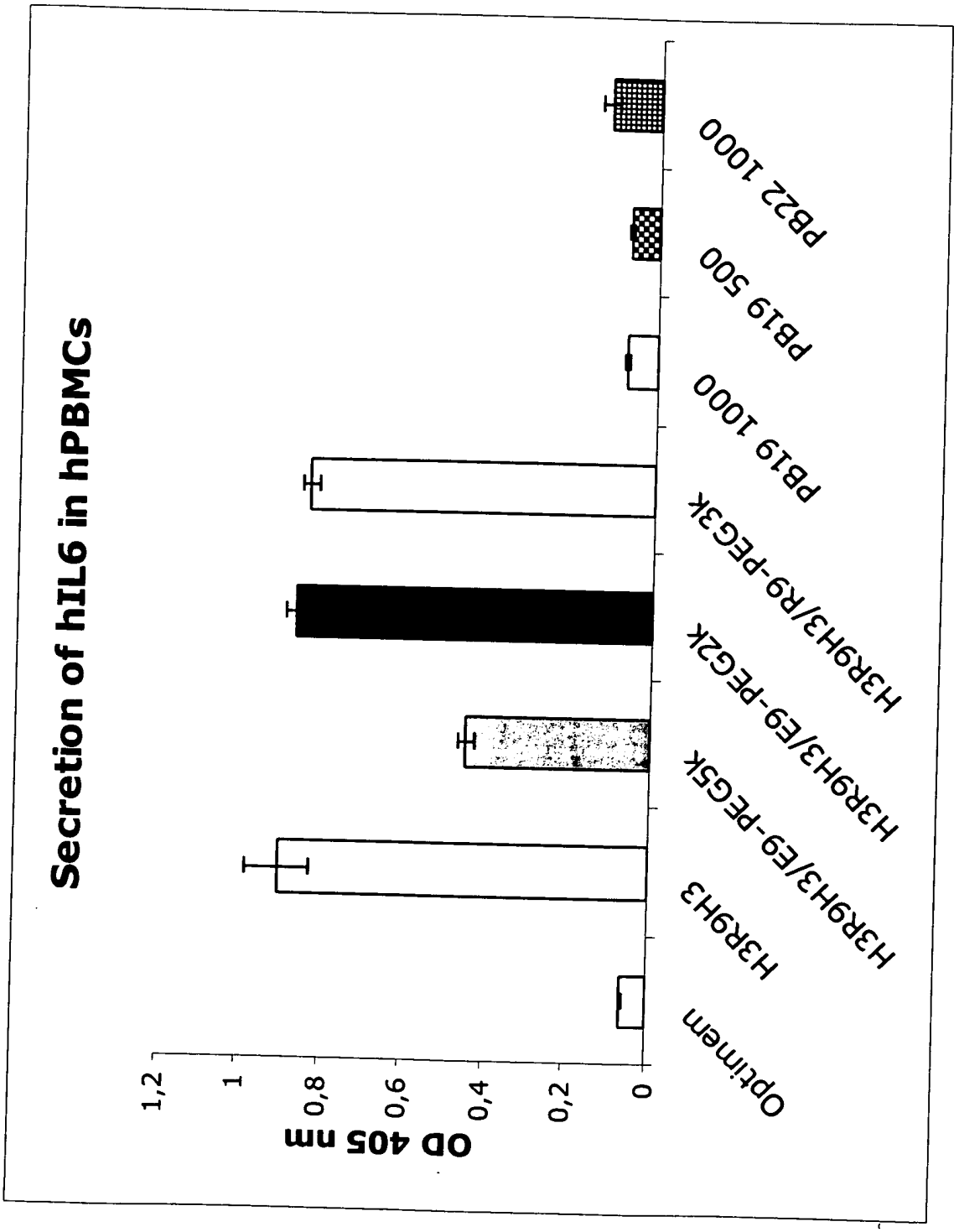

Secretion of hIL6 in hPBMCs
OD 405 nm
0
0,2
0,4
0,6
0,8
1
1,2
Optimem
H3R9H3
H3R9H3/E9-PEG5k
H3R9H3/E9-PEG2k
H3R9H3/R9-PEG3k
PB19 1000
PB19 500
PB22 1000

Figure 13

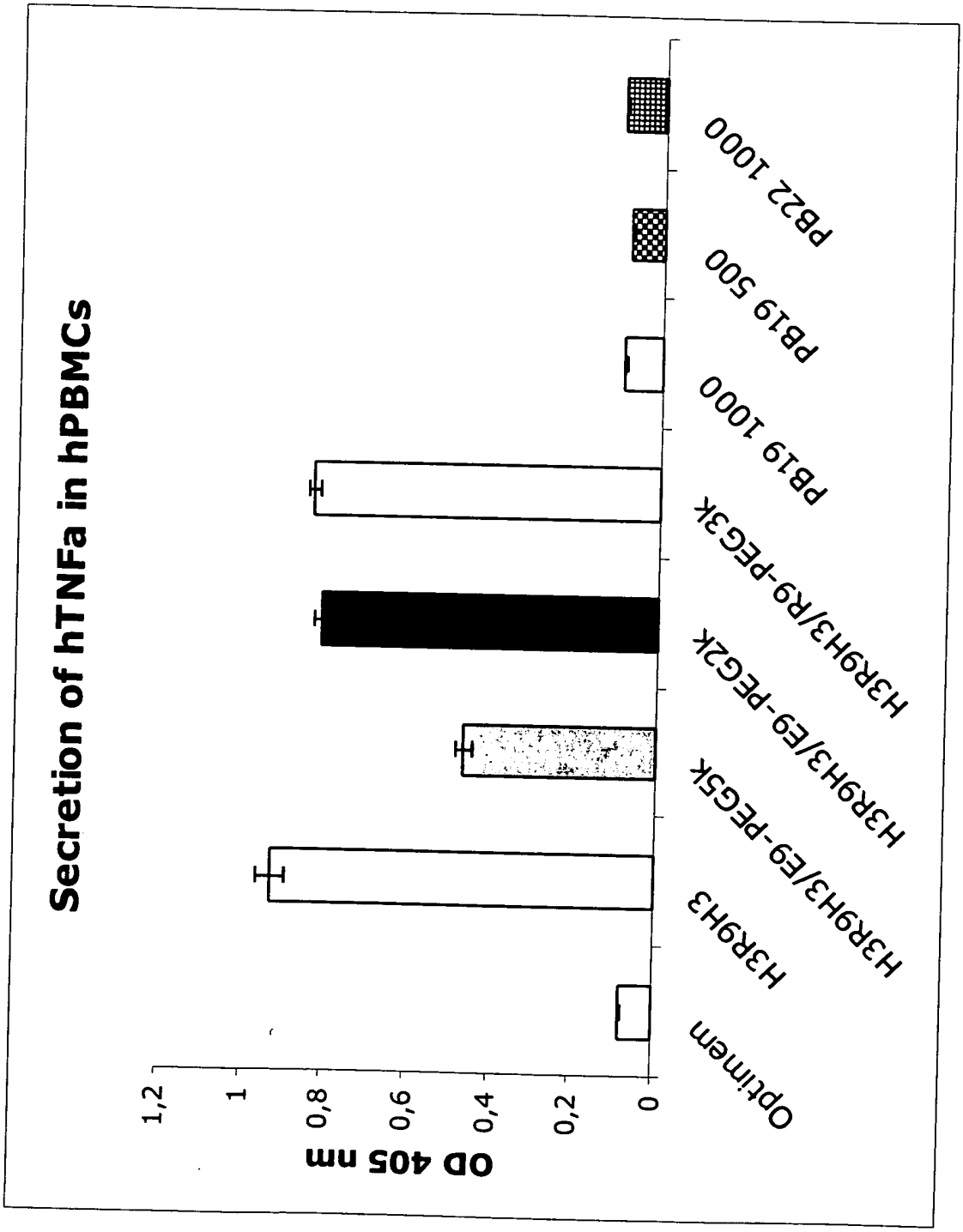

Secretion of hTNFa in hPBMCs
OD 405 nm
0
0,2
0,4
0,6
0,8
1
1,2
Optimem
H3R9H3
H3R9H3/E9-PEG5k
H3R9H3/E9-PEG2k
H3R9H3/R9-PEG3k
PB19 1000
PB19 500
PB22 1000

Figure 14

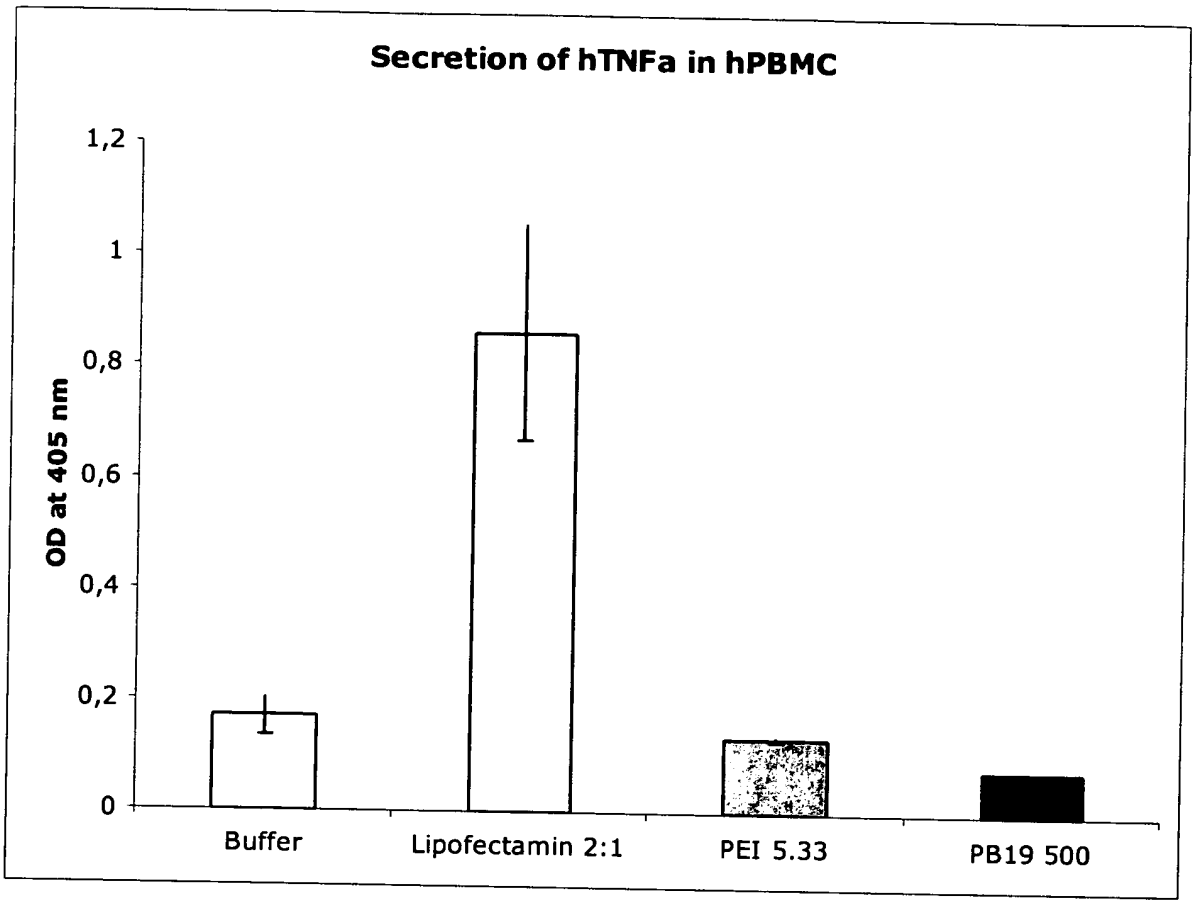

Secretion of hTNFa in hPBMC
OD at 405 nm
1,2
1
0,8
0,6
0,4
0,2
0
Buffer
Lipofectamin 2:1
PEI 5.33
PB19 500

Figure 15

```
   1  GGGAGAAAGC UUGAGGAUGG AGGACGCCAA GAACAUCAAG AAGGGCCCGG
  51  CGCCCUUCUA CCCGCUGGAG GACGGGACCG CCGGCGAGCA GCUCCACAAG
 101  GCCAUGAAGC GGUACGCCCU GGUGCCGGGC ACGAUCGCCU UCACCGACGC
 151  CCACAUCGAG GUCGACAUCA CCUACGCGGA GUACUUCGAG AUGAGCGUGC
 201  GCCUGGCCGA GGCCAUGAAG CGGUACGGCC UGAACACCAA CCACCGGAUC
 251  GUGGUGUGCU CGGAGAACAG CCUGCAGUUC UUCAUGCCGG UGCUGGGCGC
 301  CCUCUUCAUC GGCGUGGCCG UCGCCCCGGC GAACGACAUC UACAACGAGC
 351  GGGAGCUGCU GAACAGCAUG GGGAUCAGCC AGCCGACCGU GGUGUUCGUG
 401  AGCAAGAAGG GCCUGCAGAA GAUCCUGAAC GUGCAGAAGA AGCUGCCCAU
 451  CAUCCAGAAG AUCAUCAUCA UGGACAGCAA GACCGACUAC CAGGGCUUCC
 501  AGUCGAUGUA CACGUUCGUG ACCAGCCACC UCCCGCCGGG CUUCAACGAG
 551  UACGACUUCG UCCCGGAGAG CUUCGACCGG GACAAGACCA UCGCCCUGAU
 601  CAUGAACAGC AGCGGCAGCA CCGGCCUGCC GAAGGGGGUG GCCCUGCCGC
 651  ACCGGACCGC CUGCGUGCGC UUCUCGCACG CCCGGGACCC CAUCUUCGGC
 701  AACCAGAUCA UCCCGGACAC CGCCAUCCUG AGCGUGGUGC CGUUCCACCA
 751  CGGCUUCGGC AUGUUCACGA CCCUGGGCUA CCUCAUCUGC GGCUUCCGGG
 801  UGGUCCUGAU GUACCGGUUC GAGGAGGAGC UGUUCCUGCG GAGCCUGCAG
 851  GACUACAAGA UCCAGAGCGC GCUGCUCGUG CCGACCCUGU UCAGCUUCUU
 901  CGCCAAGAGC ACCCUGAUCG ACAAGUACGA CCUGUCGAAC CUGCACGAGA
 951  UCGCCAGCGG GGGCGCCCCG CUGAGCAAGG AGGUGGGCGA GGCCGUGGCC
1001  AAGCGGUUCC ACCUCCCGGG CAUCCGCCAG GGCUACGGCC UGACCGAGAC
1051  CACGAGCGCG AUCCUGAUCA CCCCCGAGGG GGACGACAAG CCGGGCGCCG
1101  UGGGCAAGGU GGUCCCGUUC UUCGAGGCCA AGGUGGUGGA CCUGGACACC
1151  GGCAAGACCC UGGGCGUGAA CCAGCGGGGC GAGCUGUGCG UGCGGGGGCC
1201  GAUGAUCAUG AGCGGCUACG UGAACAACCC GGAGGCCACC AACGCCCUCA
1251  UCGACAAGGA CGGCUGGCUG CACAGCGGCG ACAUCGCCUA CUGGGACGAG
1301  GACGAGCACU UCUUCAUCGU CGACCGGCUG AAGUCGCUGA UCAAGUACAA
1351  GGGCUACCAG GUGGCGCCGG CCGAGCUGGA GAGCAUCCUG CUCCAGCACC
1401  CCAACAUCUU CGACGCCGGC GUGGCCGGGC UGCCGGACGA CGACGCCGGC
1451  GAGCUGCCGG CCGCGGUGGU GGUGCUGGAG CACGGCAAGA CCAUGACGGA
1501  GAAGGAGAUC GUCGACUACG UGGCCAGCCA GGUGACCACC GCCAAGAAGC
1551  UGCGGGGCGG CGUGGUGUUC GUGGACGAGG UCCCGAAGGG CCUGACCGGG
1601  AAGCUCGACG CCCGGAAGAU CCGCGAGAUC CUGAUCAAGG CCAAGAAGGG
1651  CGGCAAGAUC GCCGUGUAAG ACUAGUUAUA AGACUGACUA GCCCGAUGGG
1701  CCUCCCAACG GGCCCUCCUC CCCUCCUUGC ACCGAGAUUA AUAAAAAAAA
1751  AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA
1801  AAAAAAUAUU CCCCCCCCCC CCCCCCCCCC CCCCCCCCCC UCUAGACAAU
1851  UGGAAUU
```

Figure 16