Figure 1

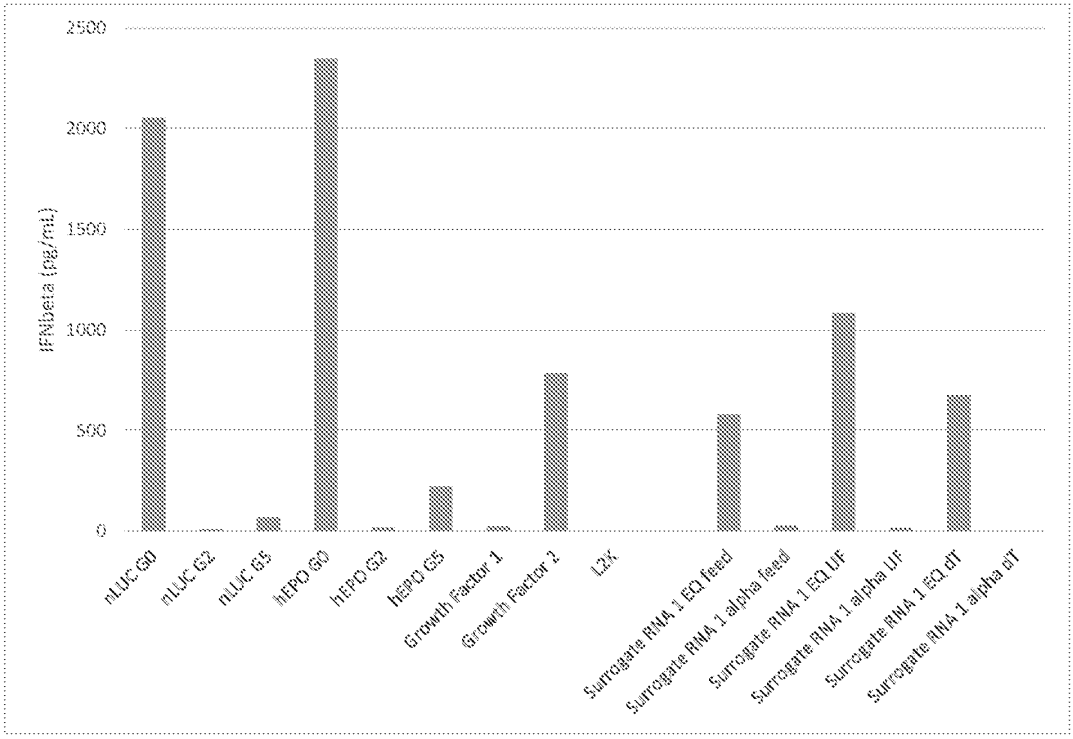
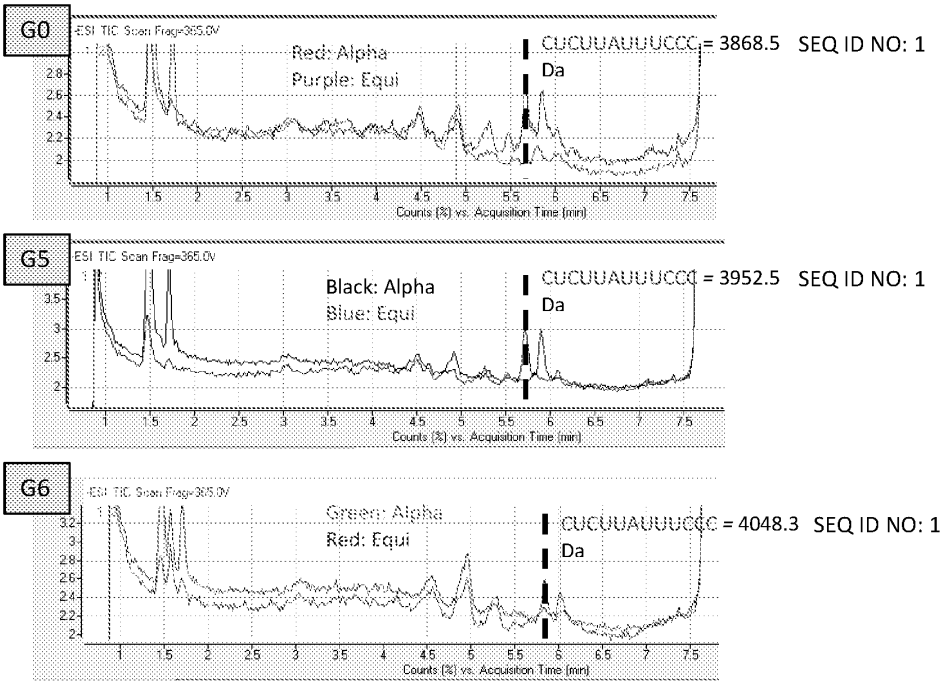

2500
2000
1500
1000
500
0
IFNbeta (pg/mL)
rLUC G0
rLUC G2
rLUC G5
hEPO G0
hEPO G2
hEPO G5
Growth Factor 1
Growth Factor 2
L2K
Surrogate RNA 1 ECI feed
Surrogate RNA 1 alpha feed
Surrogate RNA 1 ECI UF
Surrogate RNA 1 alpha UF
Surrogate RNA 1 ECI dT
Surrogate RNA 1 alpha dT

Figure 2.


G0
ESI TIC Scan Frag=365.0V
Red: Alpha
Purple: Equi
CUCUUAUUUCCC = 3868.5 Da
SEQ ID NO: 1
Counts (%) vs. Acquisition Time (min)
G5
ESI TIC Scan Frag=365.0V
Black: Alpha
Blue: Equi
CUCUUAUUUCCC = 3952.5 Da
SEQ ID NO: 1
Counts (%) vs. Acquisition Time (min)
G6
ESI TIC Scan Frag=365.0V
Green: Alpha
Red: Equi
CUCUUAUUUCCC = 4048.3 Da
SEQ ID NO: 1
Counts (%) vs. Acquisition Time (min)

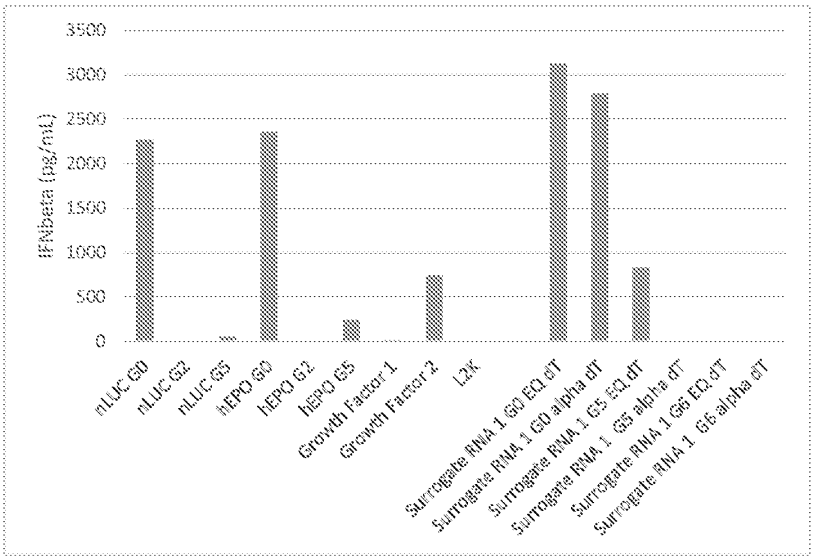

IFNbeta (pg/mL)
3500
3000
2500
2000
1500
1000
500
0
nLUC G0
nLUC G2
nLUC G5
hEPO G0
hEPO G2
hEPO G5
Growth Factor 1
Growth Factor 2
L2K
Surrogate RNA 1 G0 EC1 dT
Surrogate RNA 1 G0 alpha dT
Surrogate RNA 1 G5 EC1 dT
Surrogate RNA 1 G5 alpha dT
Surrogate RNA 1 G6 EC1 dT
Surrogate RNA 1 G6 alpha dT

Figure 3.

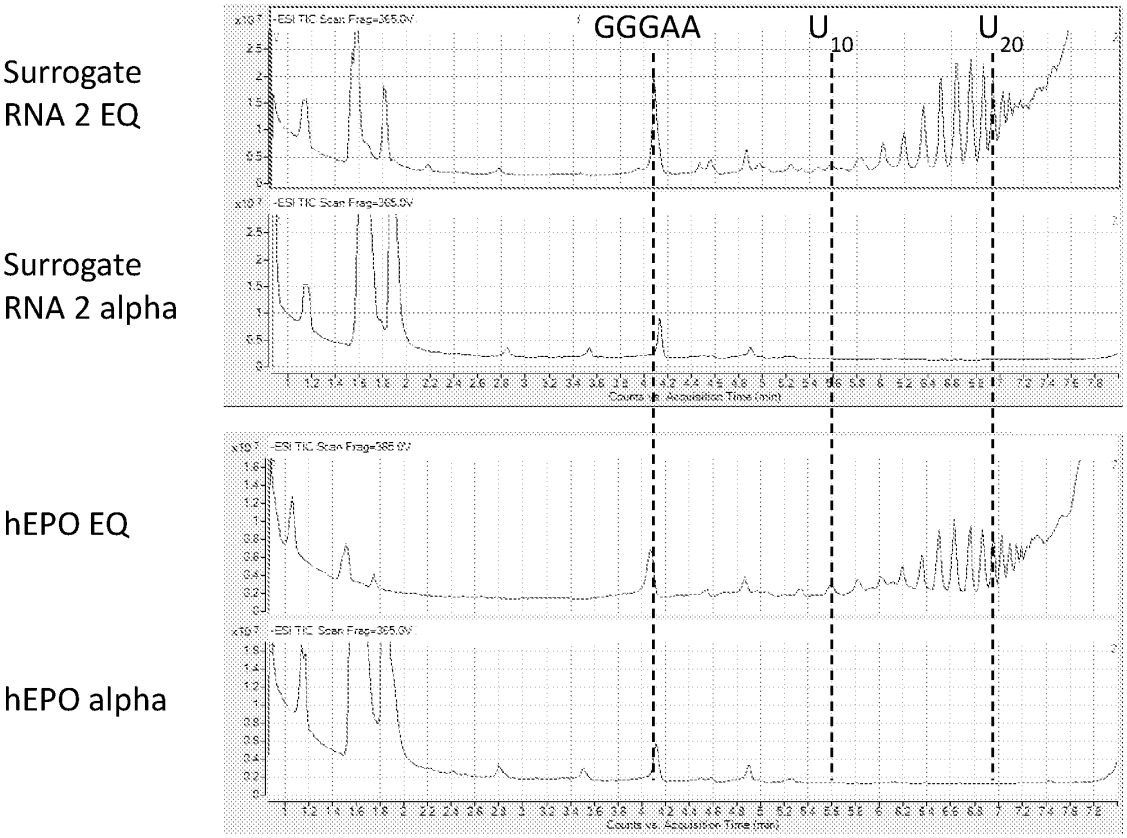
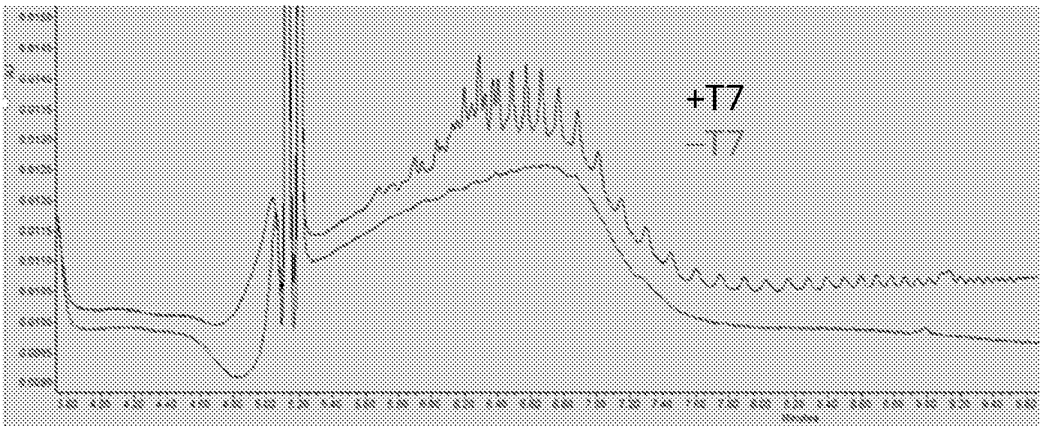

Surrogate RNA 2 EQ
Surrogate RNA 2 alpha
hEPO EQ
hEPO alpha
GGGAA
U10
U20
-ESI TIC Scan Frag=365.0V
Counts vs. Acquisition Time (min)

Figure 4.


+T7
-T7

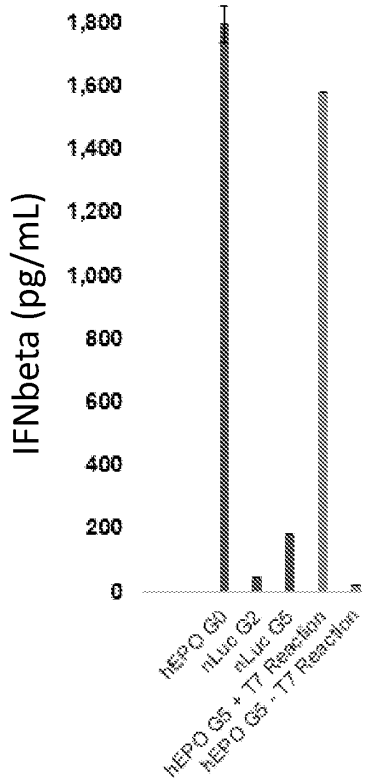

IFNbeta (pg/mL)
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
hEPO G0
mLuc G2
eLuc G5
hEPO G5 + T7 Reaction
hEPO G5 - T7 Reaction

Figure 5A.

Appearance of lower MW species in blue trace (+ RNase III) correlates with amount of dsRNA impurity in sample

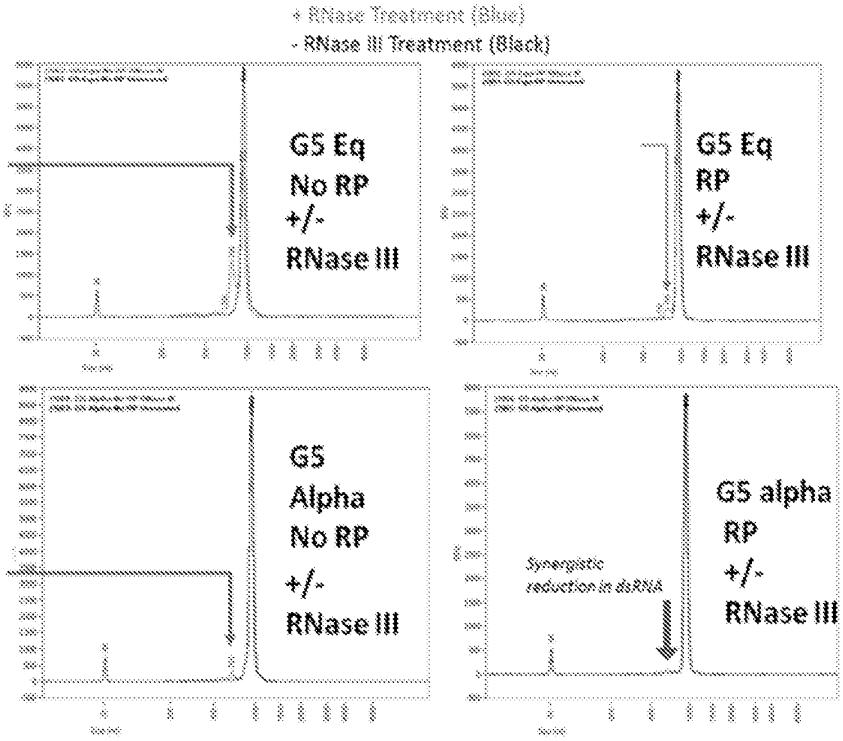


Figure 5B.

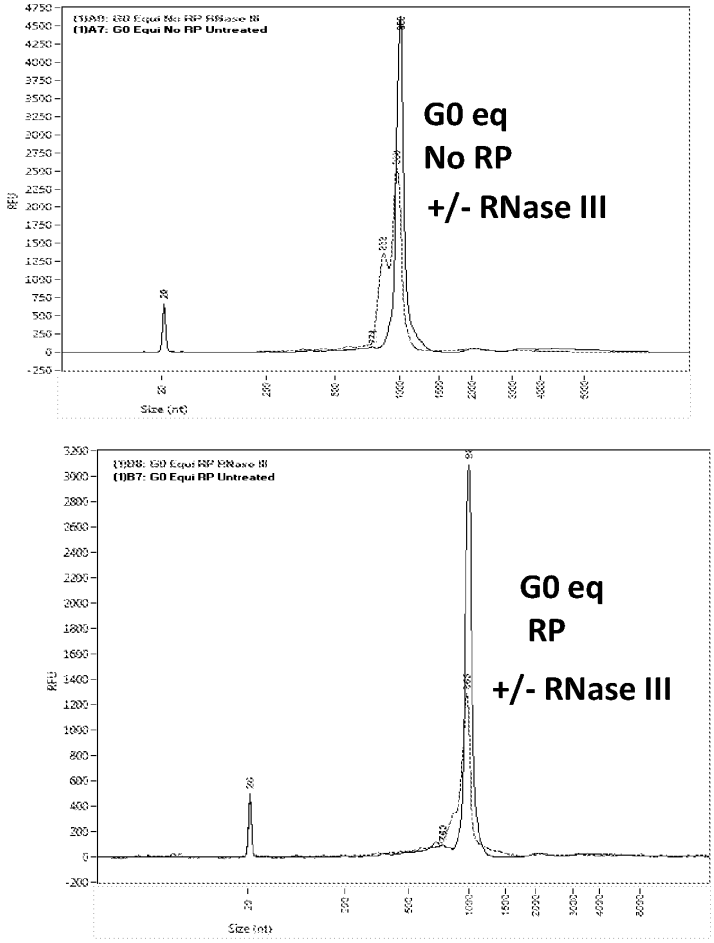
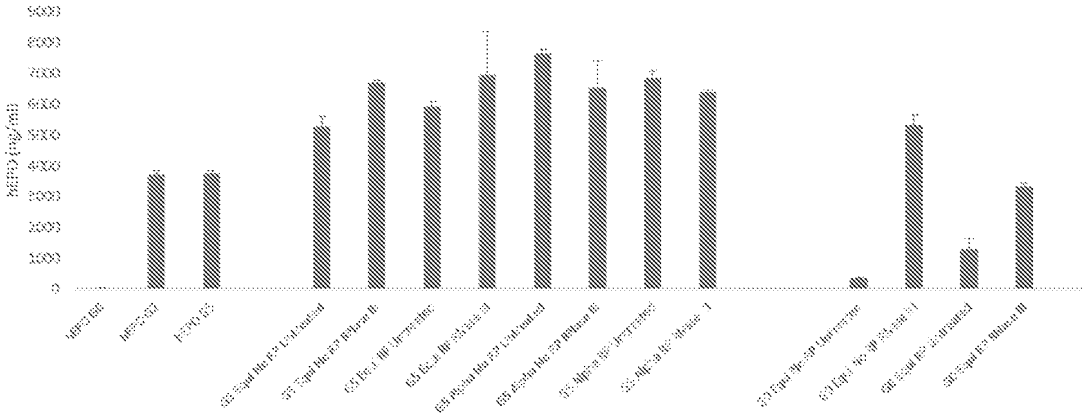

(1)A7: G0 Equi No RP Untreated
G0 eq
No RP
+/- RNase III
RFU
Size (nt)
(1)B7: G0 Equi RP Untreated
G0 eq
RP
+/- RNase III
RFU
Size (nt)

Figure 6.



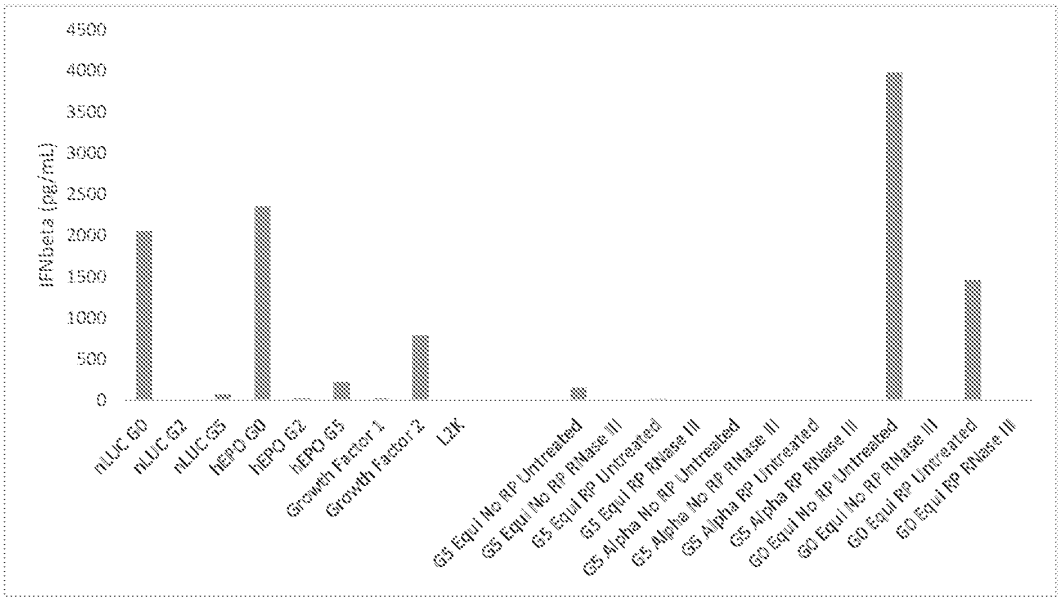

IFNbeta (pg/mL)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
nLUC G0
nLUC G2
nLUC G5
hEPO G0
hEPO G2
hEPO G5
Growth Factor 1
Growth Factor 2
L2K
G5 Equi Nc RP Untreated
G5 Equi Nc RP RNase III
G5 Equi RP Untreated
G5 Equi RP RNase III
G5 Alpha Nc RP Untreated
G5 Alpha Nc RP RNase III
G5 Alpha RP Untreated
G5 Alpha RP RNase III
G0 Equi Nc RP Untreated
G0 Equi Nc RP RNase III
G0 Equi RP Untreated
G0 Equi RP RNase III

Figure 7.

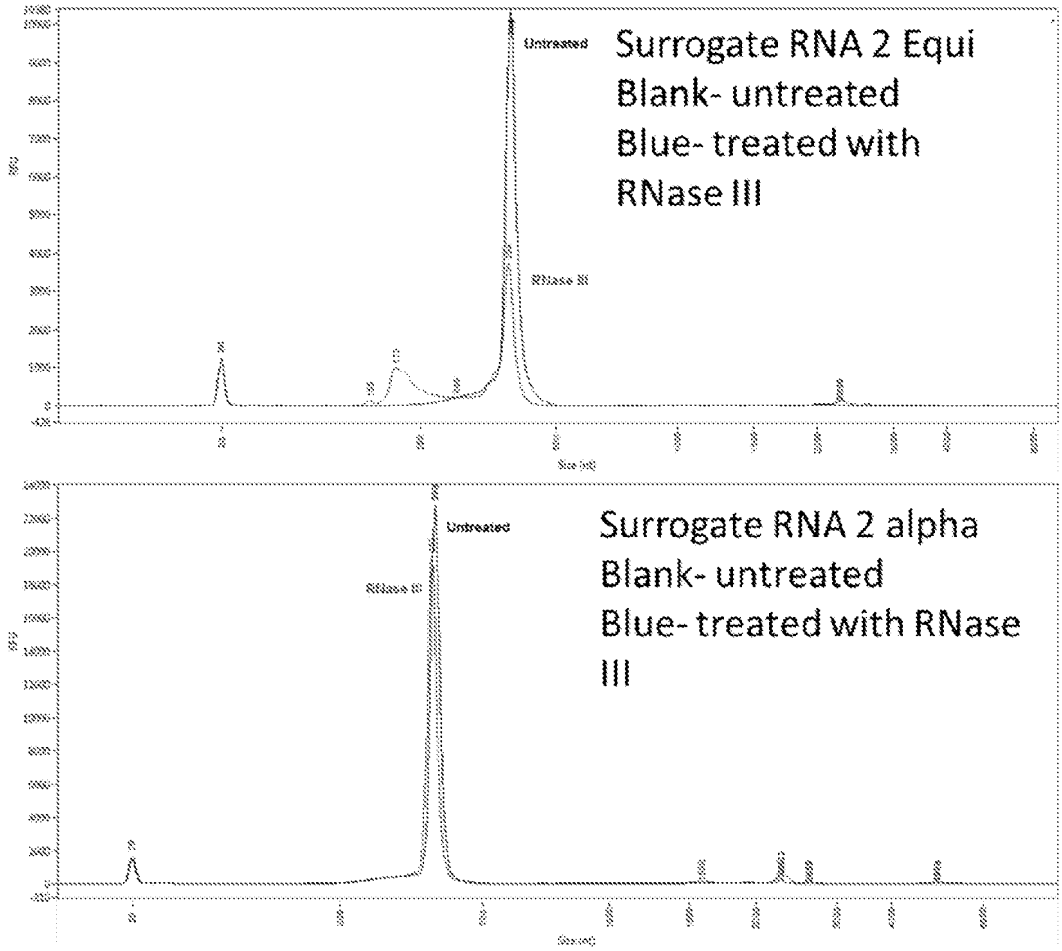

Surrogate RNA 2 Equi
Blank- untreated
Blue- treated with
RNase III
Surrogate RNA 2 alpha
Blank- untreated
Blue- treated with RNase
III

Figure 8A.

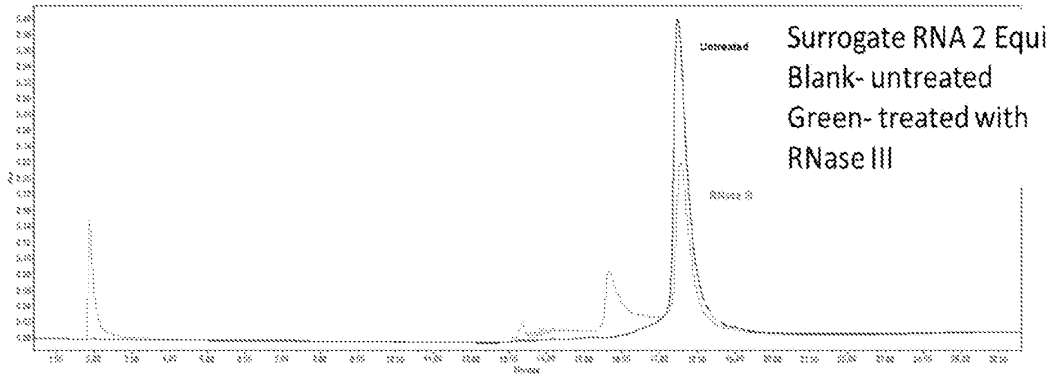

Surrogate RNA 2 Equi
Blank- untreated
Green- treated with
RNase III

Figure 8B.

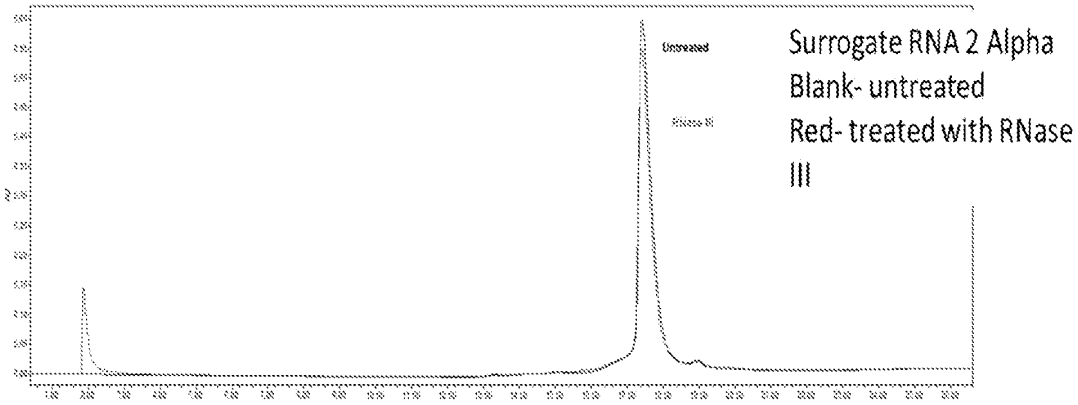

Surrogate RNA 2 Alpha
Blank- untreated
Red- treated with RNase III

Figure 9.

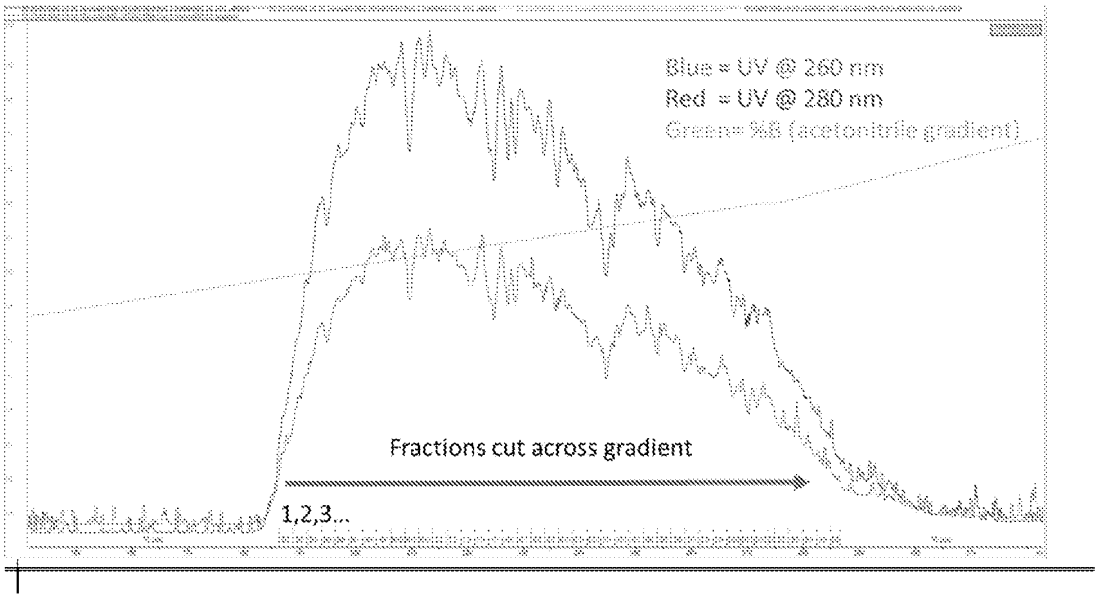

Blue = UV @ 260 nm
Red = UV @ 280 nm
Green= %B (acetonitrile gradient)
Fractions cut across gradient
1,2,3...

Figure 10A.

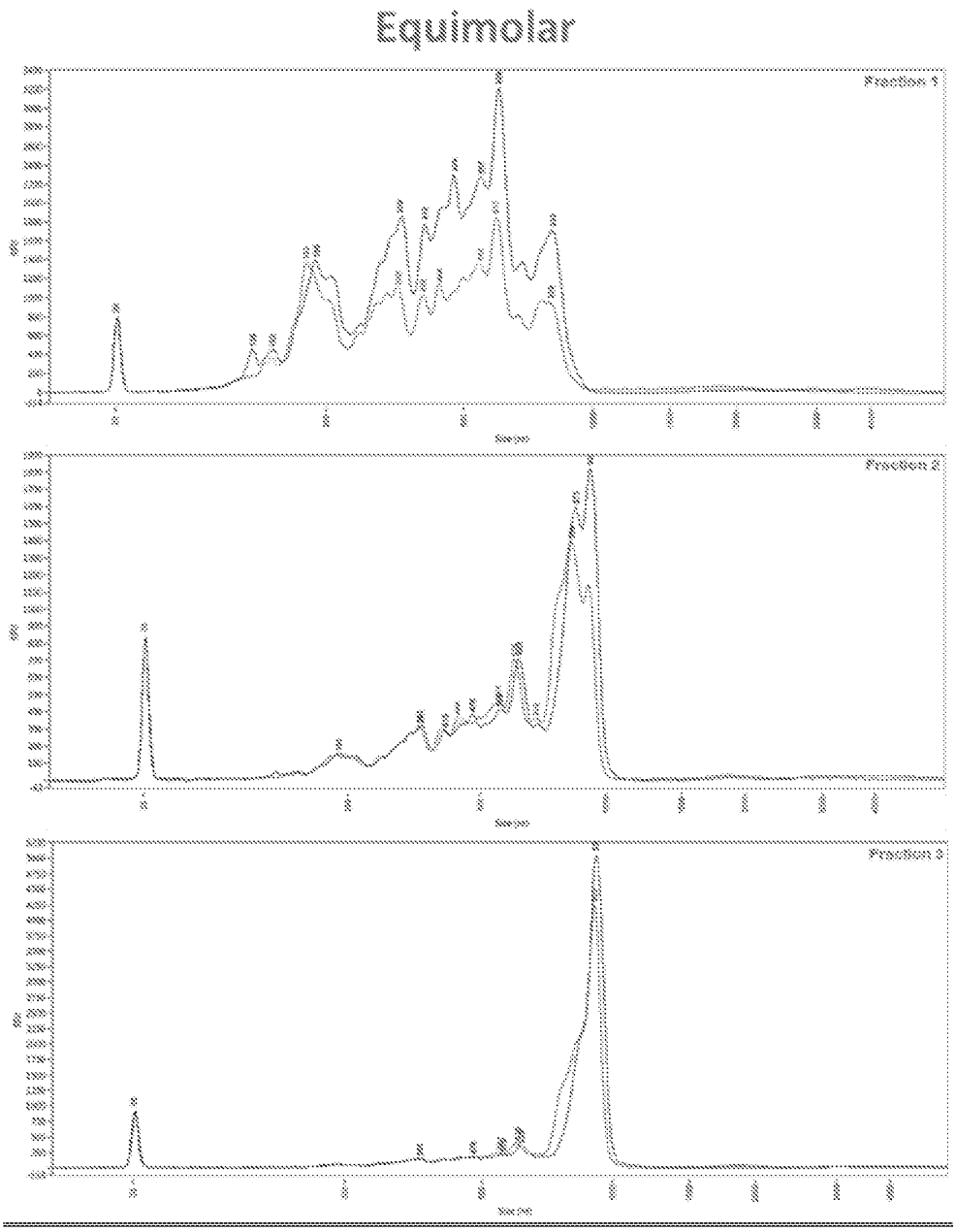


Figure 10B.

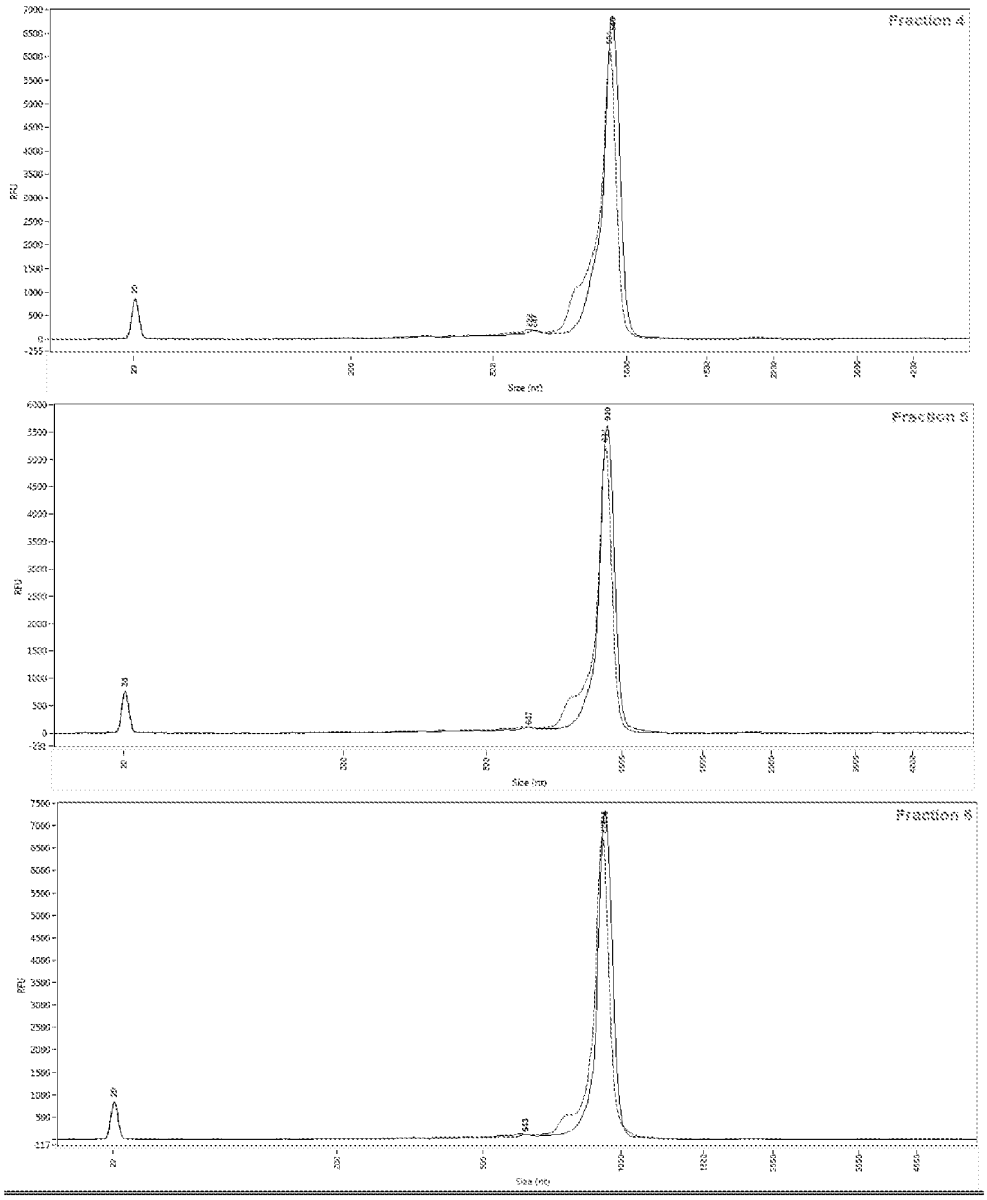


Figure 10C.

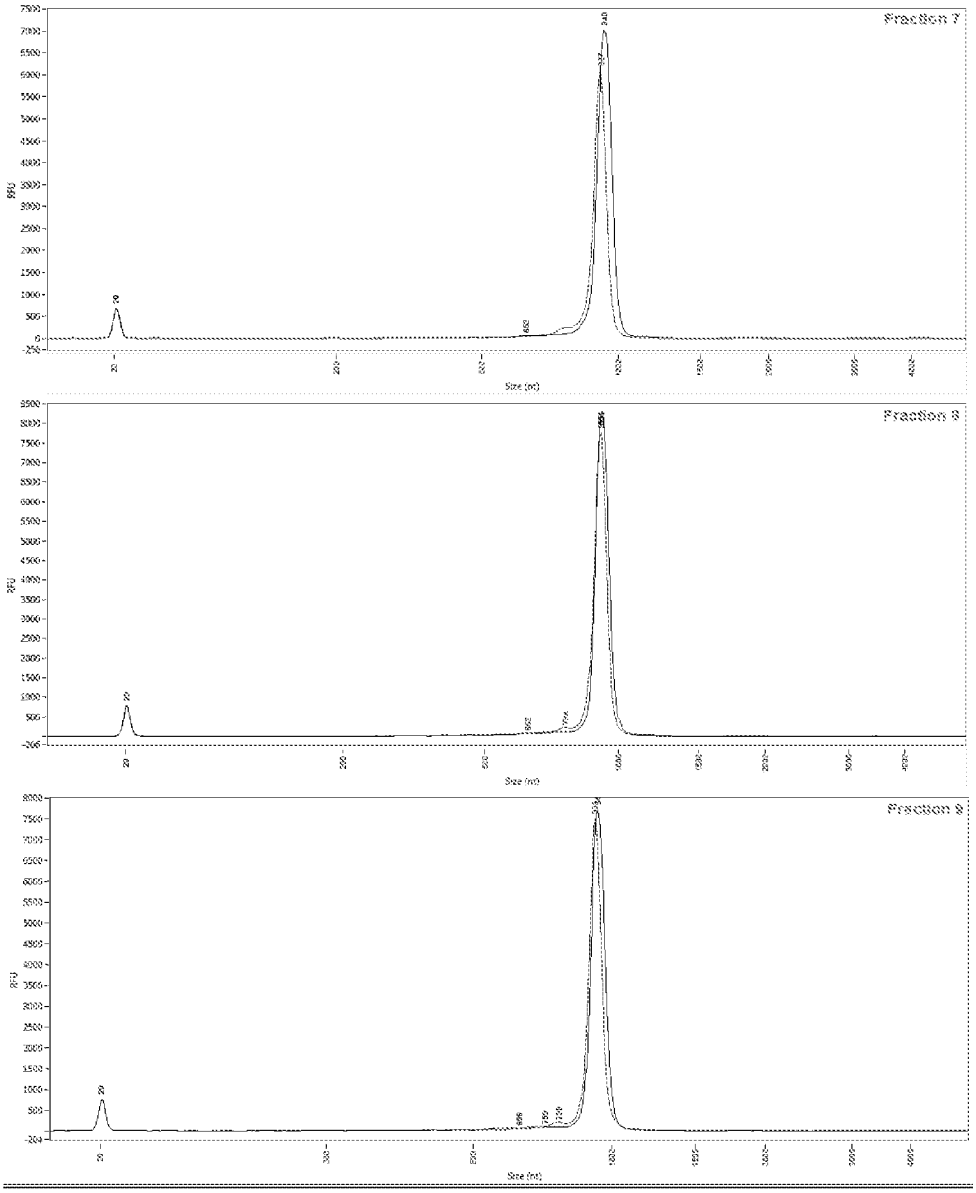


Figure 10D.

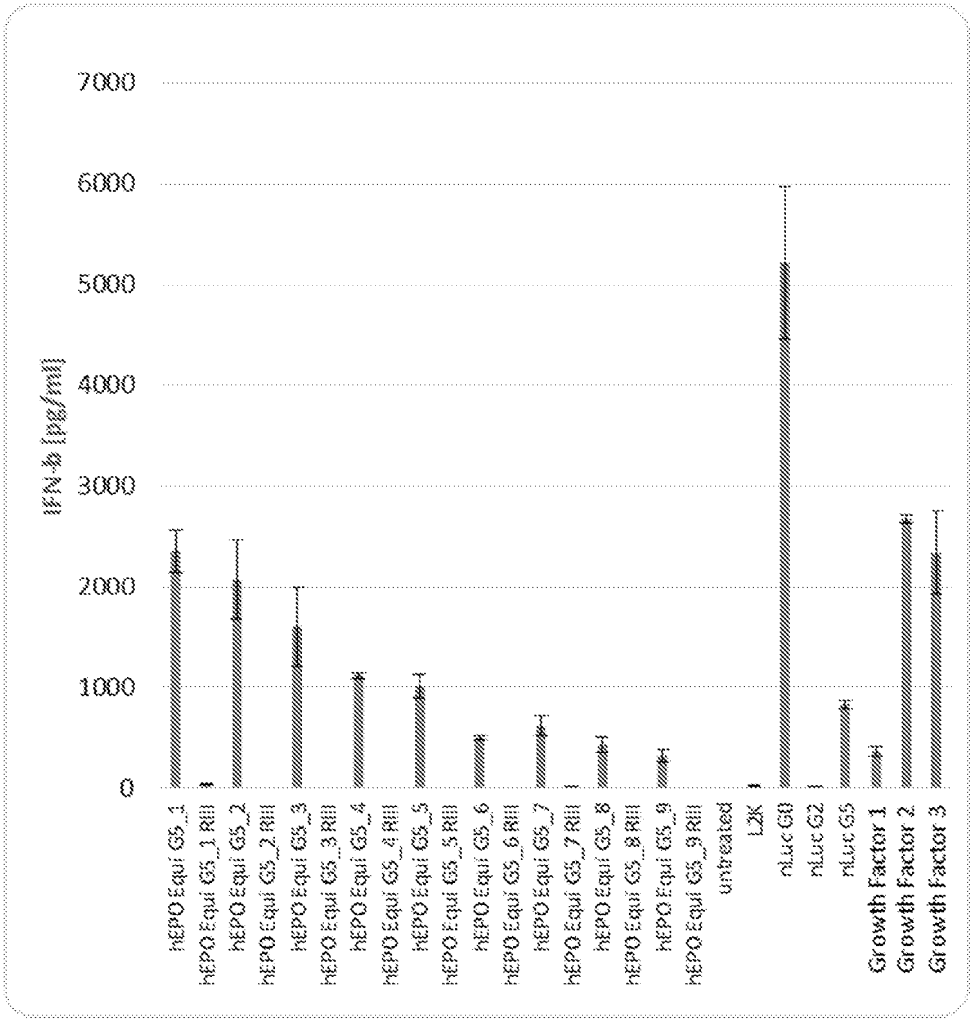

7000
6000
5000
4000
3000
2000
1000
0
IFN-α [pg/ml]
hEPO Equi G5_1
hEPO Equi G5_1 RIII
hEPO Equi G5_2
hEPO Equi G5_2 RIII
hEPO Equi G5_3
hEPO Equi G5_3 RIII
hEPO Equi G5_4
hEPO Equi G5_4 RIII
hEPO Equi G5_5
hEPO Equi G5_5 RIII
hEPO Equi G5_6
hEPO Equi G5_6 RIII
hEPO Equi G5_7
hEPO Equi G5_7 RIII
hEPO Equi G5_8
hEPO Equi G5_8 RIII
hEPO Equi G5_9
hEPO Equi G5_9 RIII
untreated
L2K
nLuc G0
nLuc G2
nLuc G5
Growth Factor 1
Growth Factor 2
Growth Factor 3

Figure 11A.

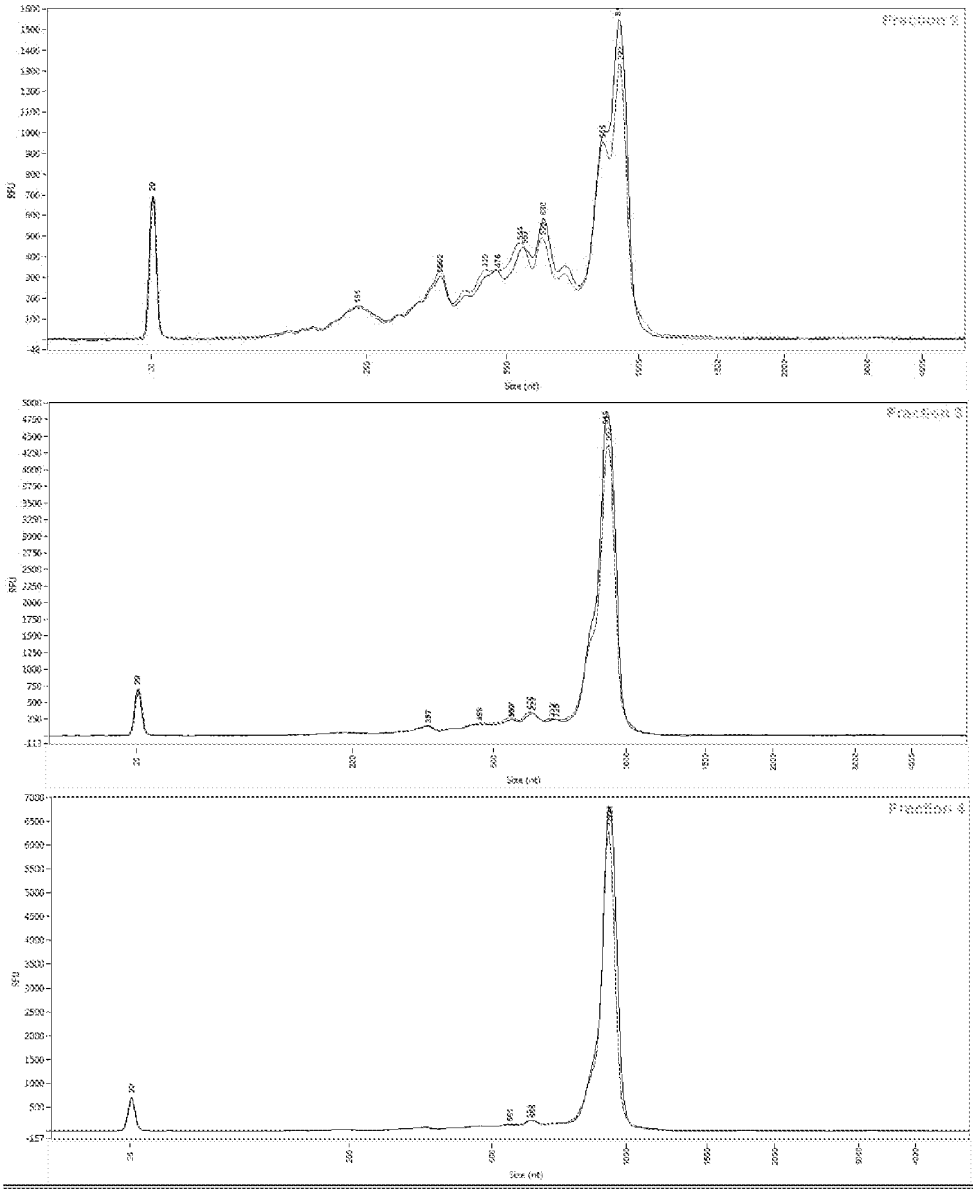


Figure 11B.

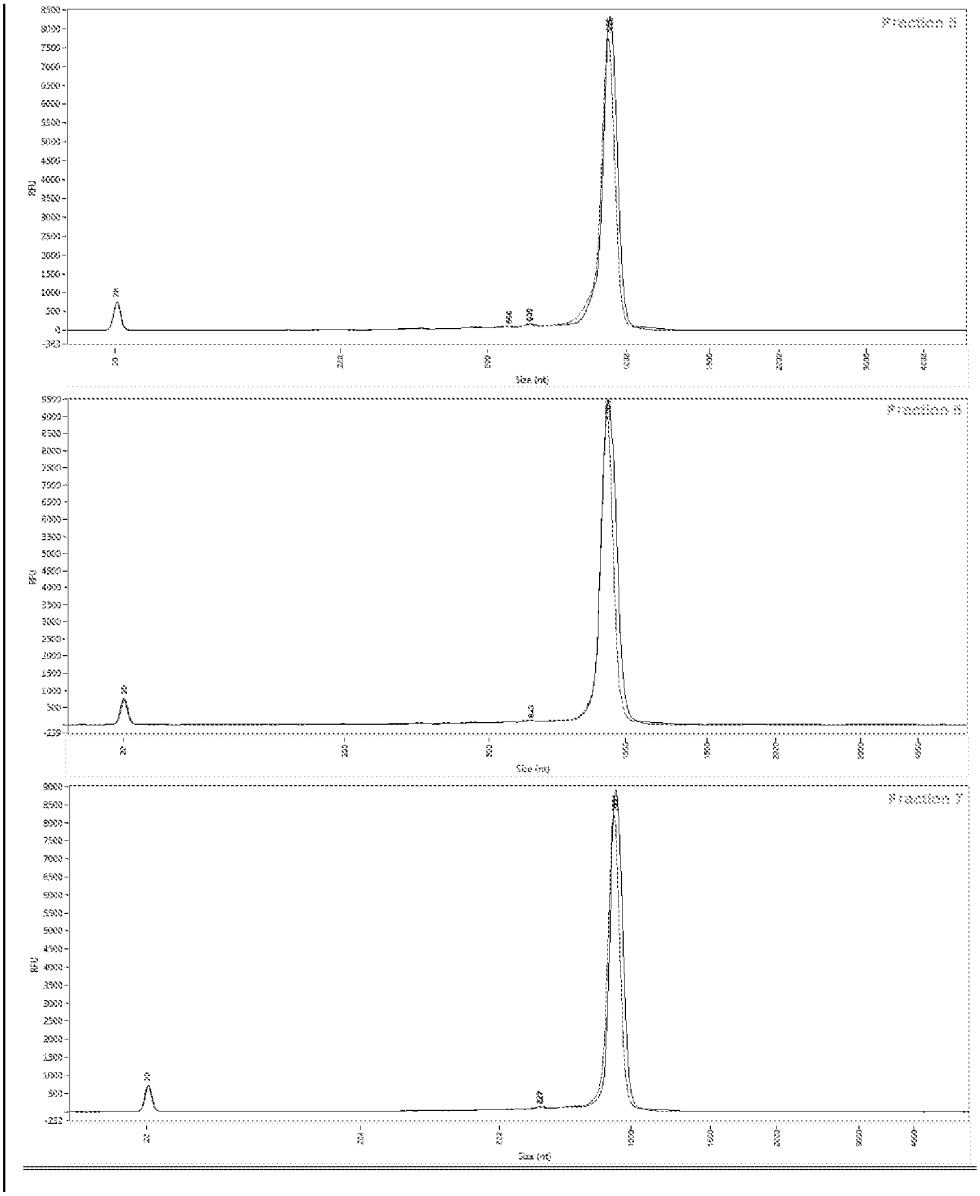

Fraction 6
FU
Size (nt)
Fraction 7
FU
Size (nt)
Fraction 8
FU
Size (nt)

Figure 11C.

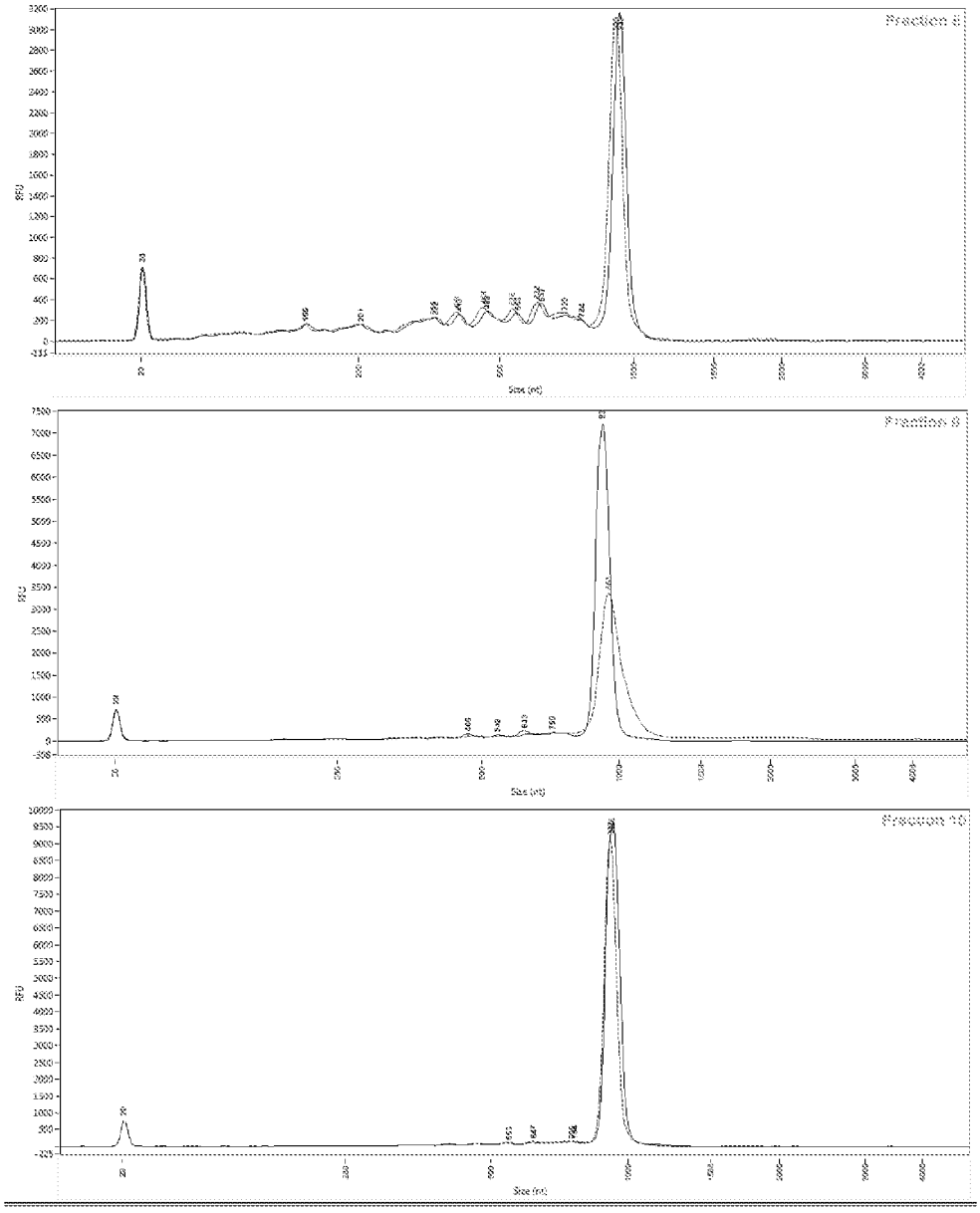


Figure 11C.

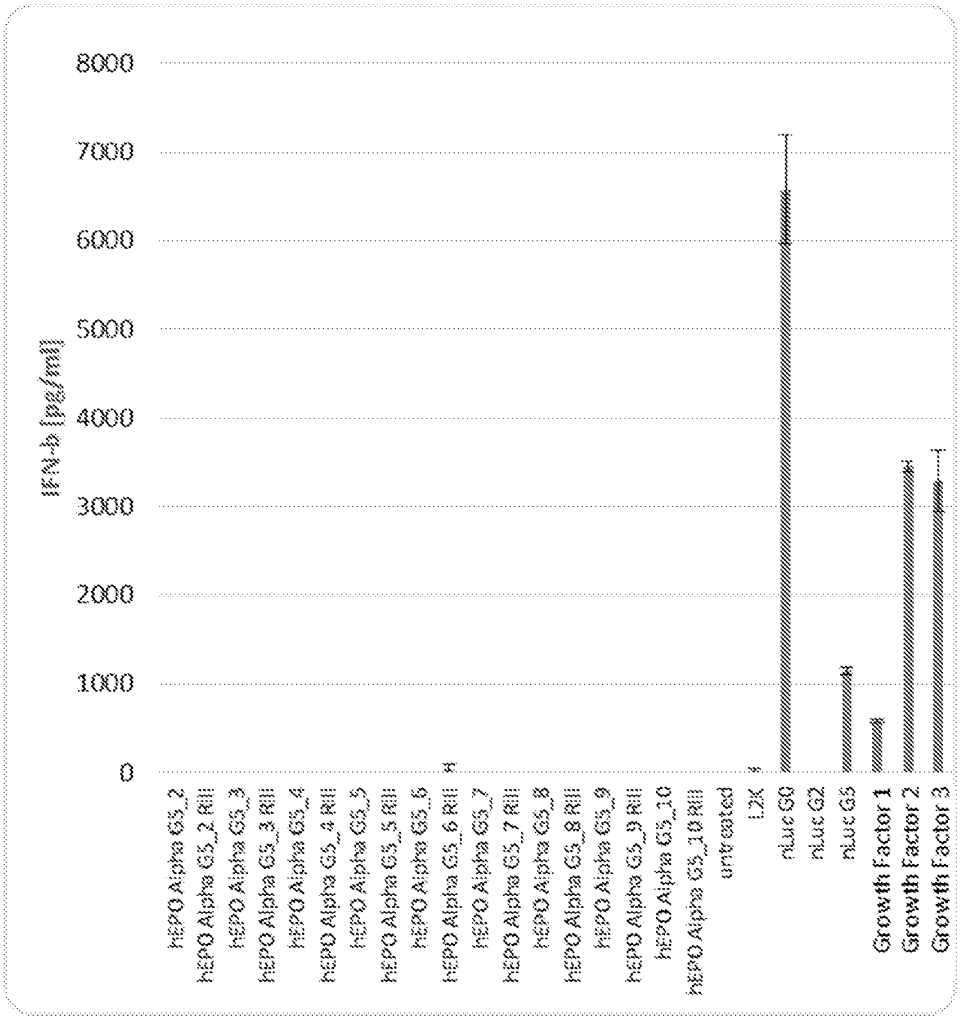

IFN-b [pg/ml]
8000
7000
6000
5000
4000
3000
2000
1000
0
hEPO Alpha G5_2
hEPO Alpha G5_2 RIII
hEPO Alpha G5_3
hEPO Alpha G5_3 RIII
hEPO Alpha G5_4
hEPO Alpha G5_4 RIII
hEPO Alpha G5_5
hEPO Alpha G5_5 RIII
hEPO Alpha G5_6
hEPO Alpha G5_6 RIII
hEPO Alpha G5_7
hEPO Alpha G5_7 RIII
hEPO Alpha G5_8
hEPO Alpha G5_8 RIII
hEPO Alpha G5_9
hEPO Alpha G5_9 RIII
hEPO Alpha G5_10
hEPO Alpha G5_10 RIII
untreated
L2K
nLuc G0
nLuc G2
nLuc G5
Growth Factor 1
Growth Factor 2
Growth Factor 3

Figure 12.

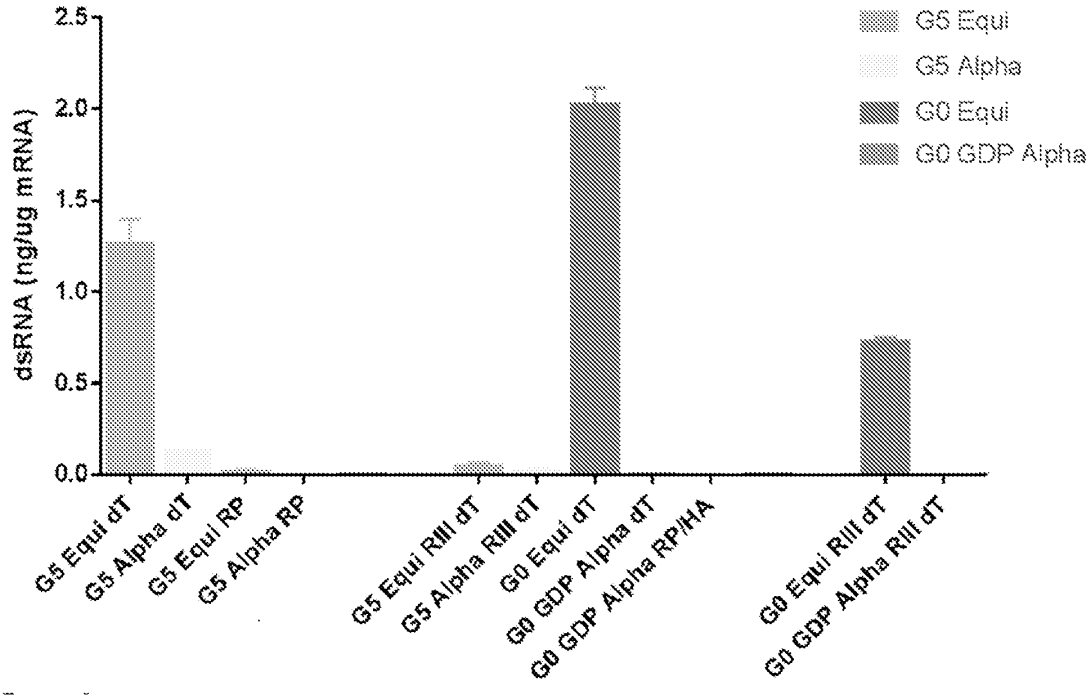

G5 Equi
G5 Alpha
G0 Equi
G0 GDP Alpha
dsRNA (ng/ug mRNA)
2.5
2.0
1.5
1.0
0.5
0.0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP/HA
G0 Equi RIII dT
G0 GDP Alpha RIII dT

Figure 13.

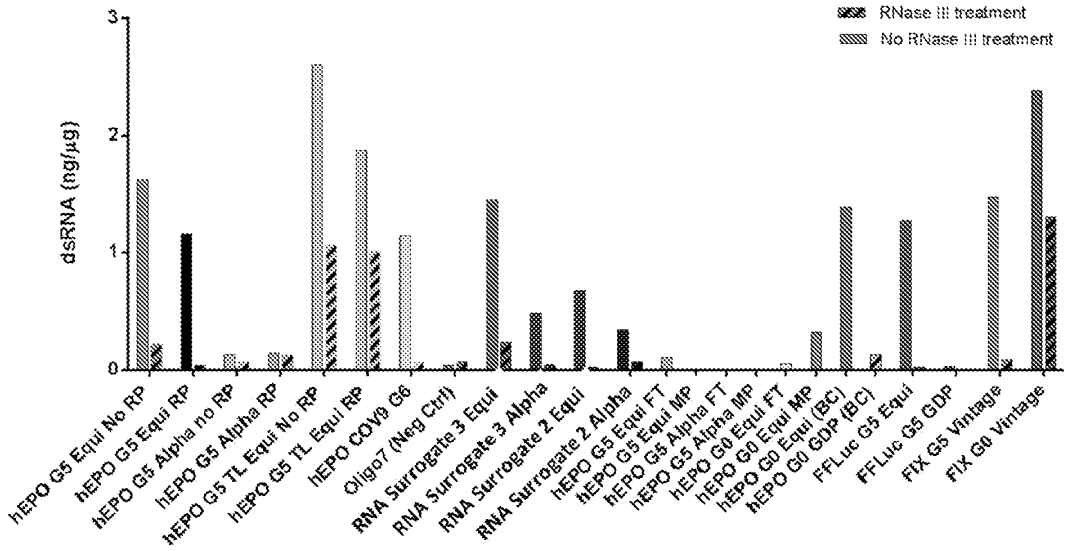

RNase III treatment
No RNase III treatment
dsRNA (ng/µg)
0
1
2
3
hEPO G5 Equi No RP
hEPO G5 Equi RP
hEPO G5 Alpha no RP
hEPO G5 Alpha RP
hEPO G5 TL Equi No RP
hEPO G5 TL Equi RP
hEPO COV9 G6
Oligo7 (Neg Ctrl)
RNA Surrogate 3 Equi
RNA Surrogate 3 Alpha
RNA Surrogate 2 Equi
RNA Surrogate 2 Alpha
hEPO G5 Equi FT
hEPO G5 Equi MP
hEPO G5 Alpha FT
hEPO G5 Alpha MP
hEPO G0 Equi FT
hEPO G0 Equi MP
hEPO G0 Equi (BC)
hEPO G0 GDP (BC)
FFLuc G5 Equi
FFLuc G5 GDP
FIX G5 Vintage
FIX G0 Vintage

Figure 14.

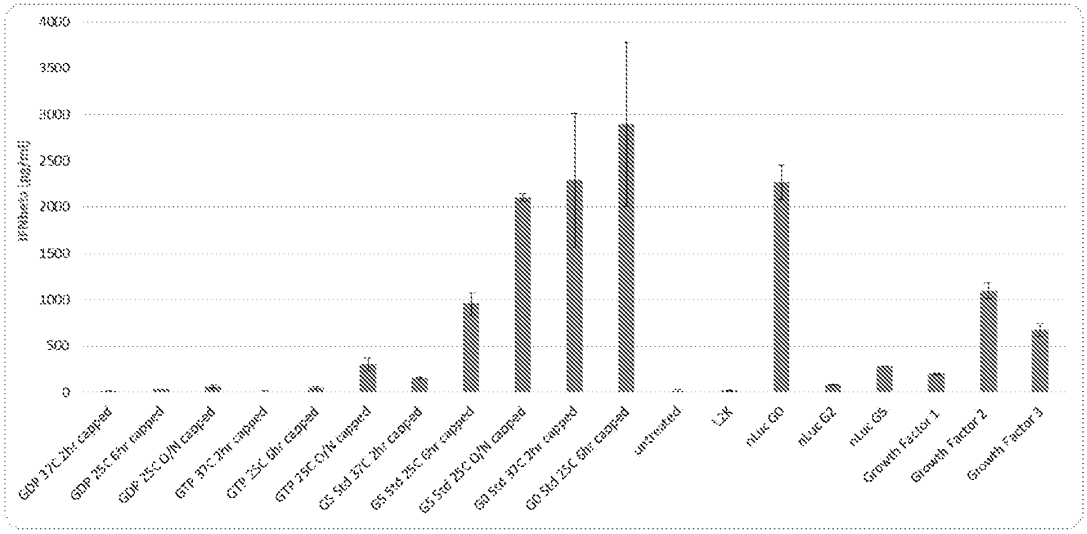

4000
3500
3000
2500
2000
1500
1000
500
0
GDP 37C 2hr capped
GDP 25C 6hr capped
GDP 25C O/N capped
GTP 37C 2hr capped
GTP 25C 6hr capped
GTP 25C O/N capped
G5 Std 37C 2hr capped
G5 Std 25C 6hr capped
G5 Std 25C O/N capped
G0 Std 37C 2hr capped
G0 Std 25C 6hr capped
untreated
L2K
nLuc G0
nLuc G2
nLuc G5
Growth Factor 1
Growth Factor 2
Growth Factor 3

Figure 15.

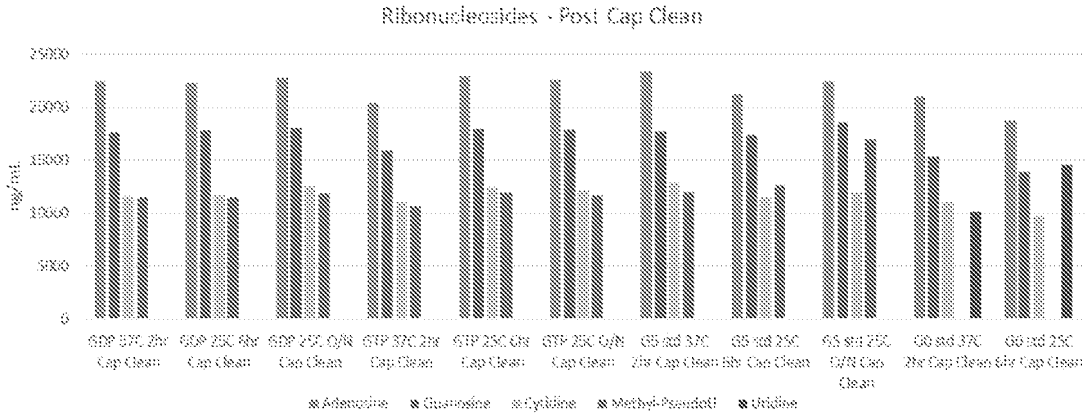

Ribonucleosides - Post Cap Clean
25000
20000
15000
10000
5000
0
ng/mL
GDP 37C 2hr Cap Clean
GDP 25C 6hr Cap Clean
GDP 25C O/N Cap Clean
GTP 37C 2hr Cap Clean
GTP 25C 6hr Cap Clean
GTP 25C O/N Cap Clean
GS ind 37C 2hr Cap Clean 6hr
GS ind 25C Cap Clean
GS ind 25C O/N Cap Clean
GG ind 37C 2hr Cap Clean 6hr
GG ind 25C Cap Clean
Adenosine
Guanosine
Cytidine
Methyl-Pseudoll
Uridine

Figure 16A.

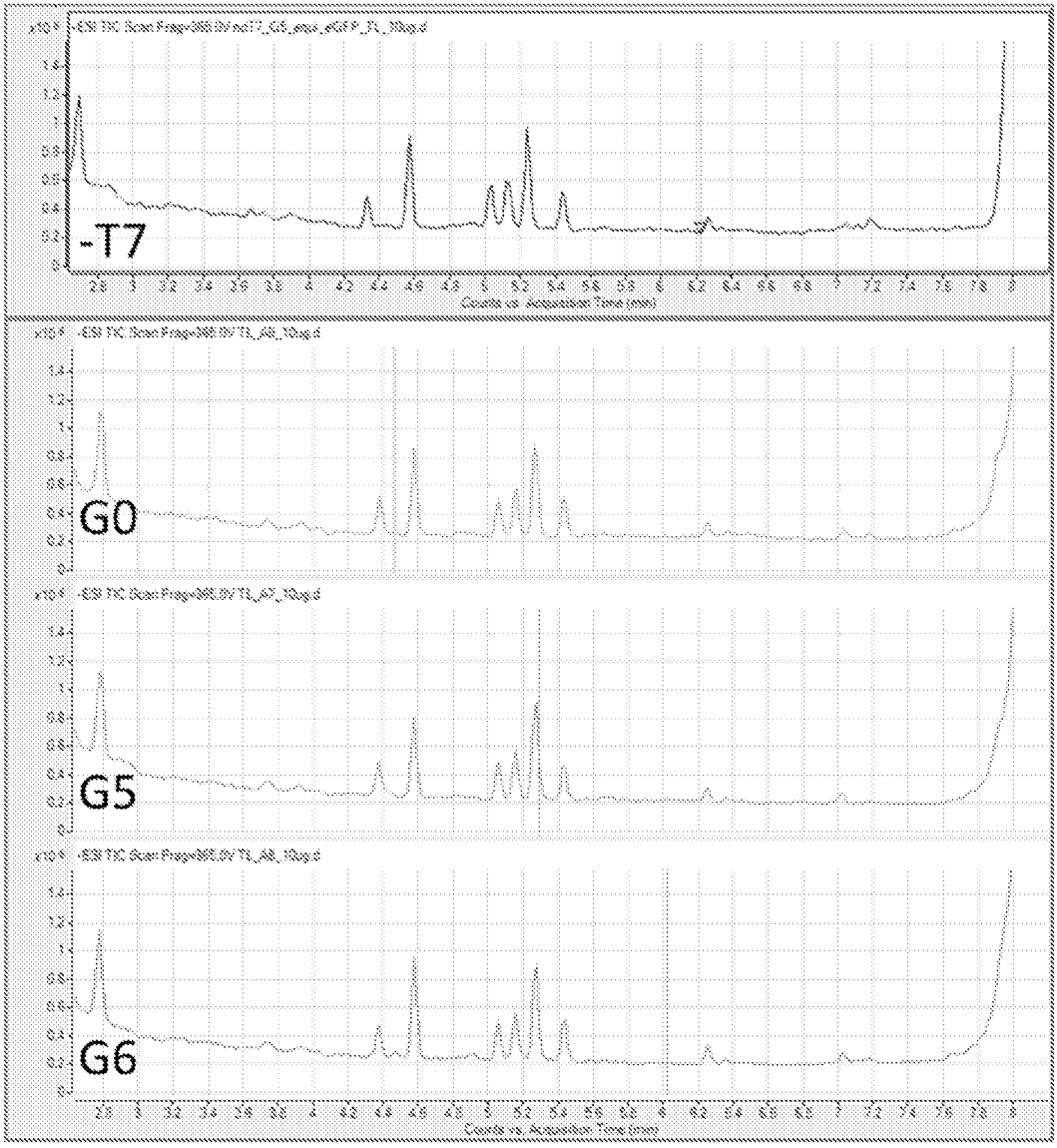
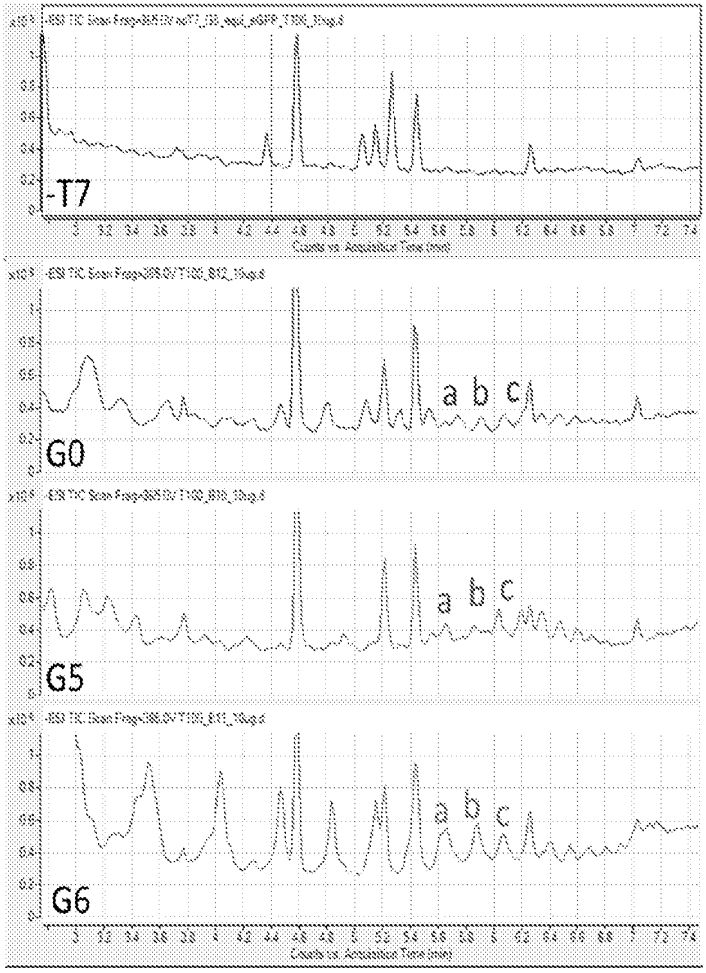


Figure 16B.



	ID
-T7	None
G0 (a)	ppp-U_{13}-OH
G0 (b)	ppp-U_{14}-OH
G0 (c)	ppp-U_{15}-OH
G5 (a)	ppp-U_{12}-OH
G5 (b)	ppp-U_{13}-OH
G5 (c)	ppp-U_{14}-OH
G6 (a)	ppp-U_{11}-OH
G6 (b)	ppp-U_{12}-OH
G6 (c)	ppp-U_{13}-OH

Figure 17.

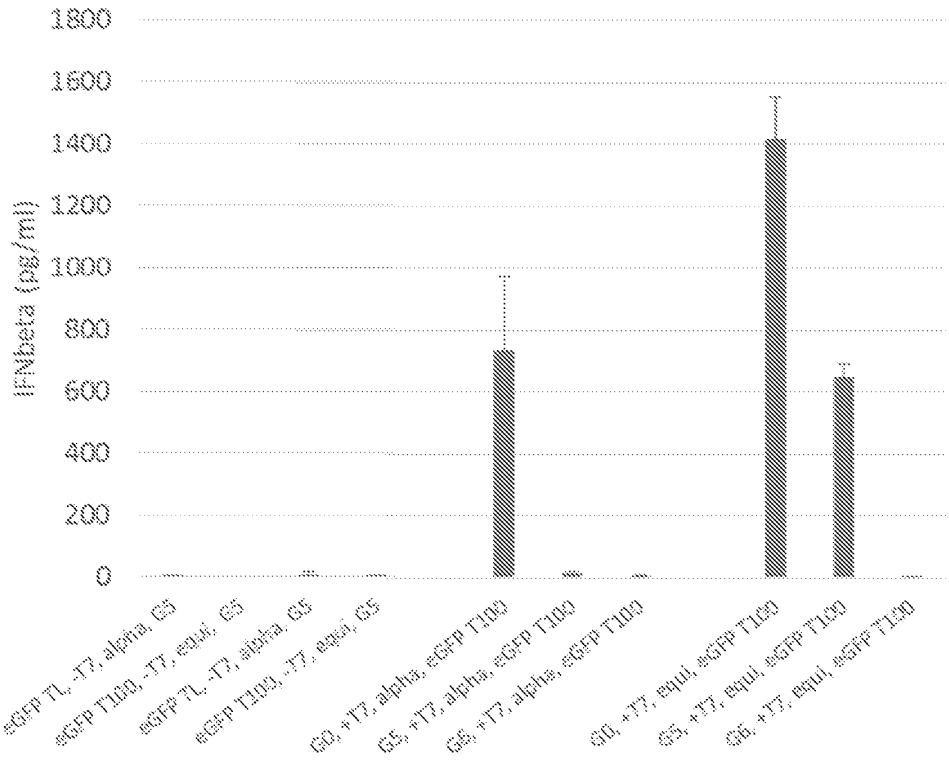

1800
1600
1400
1200
1000
800
600
400
200
0
IFNbeta (pg/ml)
eGFP TL, -T7, alpha, G5
eGFP T100, -T7, equi, G5
eGFP TL, -T7, alpha, G5
eGFP T100, -T7, equi, G5
G0, +T7, alpha, eGFP T100
G5, +T7, alpha, eGFP T100
G6, +T7, alpha, eGFP T100
G0, +T7, equi, eGFP T100
G5, +T7, equi, eGFP T100
G6, +T7, equi, eGFP T100

Figure 18.

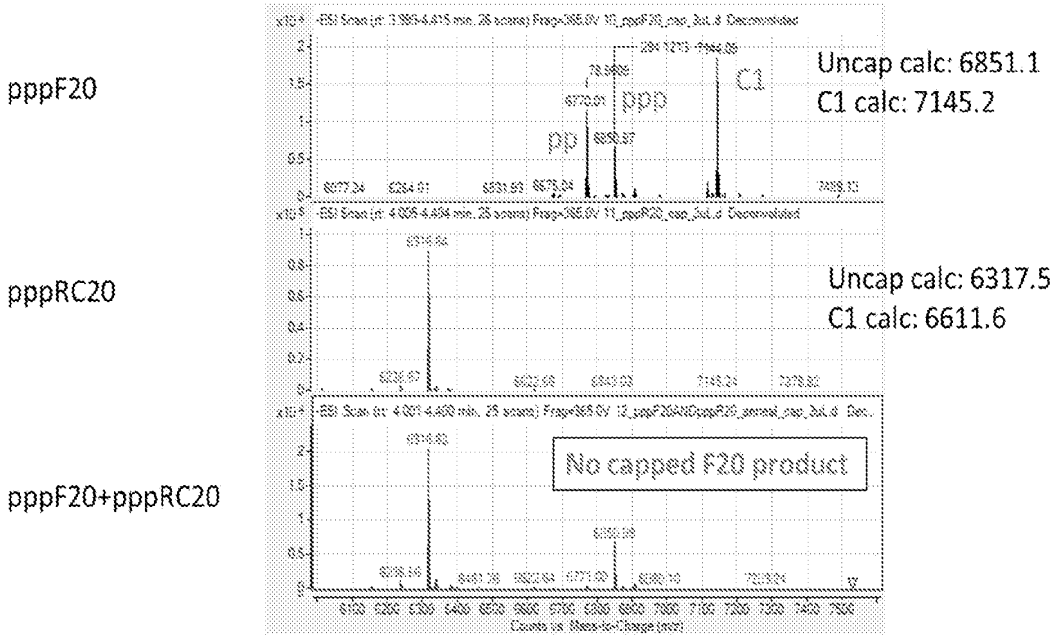

pppF20
Uncap calc: 6851.1
C1 calc: 7145.2
ppp
pp
C1
pppRC20
Uncap calc: 6317.5
C1 calc: 6611.6
pppF20+pppRC20
No capped F20 product

Figure 19.

ppp-R30 + OH-F20

OH-GGGAAAUAAGAGAGAAAAGA
CCCUUUAUUCUCUCUUUUCUCUCAUUCUU-ppp

SEQ ID NO: 2

ppp-R30 + OH-F25

OH-GGGAAAUAAGAGAGAAAAGAAGAGU
CCCUUUAUUCUCUCUUUUCUCUCAUUCUU-ppp

SEQ ID NO: 3

ppp-R30 + OH-F30

OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAA
CCCUUUAUUCUCUCUUUUCUCUCAUUCUU-ppp

SEQ ID NO: 4

ppp-R30 + OH-F35

OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAAGAAU
CCCUUUAUUCUCUCUUUUCUUCUCAUUCUU-ppp

SEQ ID NO: 5

ppp-R30 + OH-F40

OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAAGAAUAUAAG
CCCUUUAUUCUCUCUUUUCUCUCAUUCUU-ppp

SEQ ID NO: 6

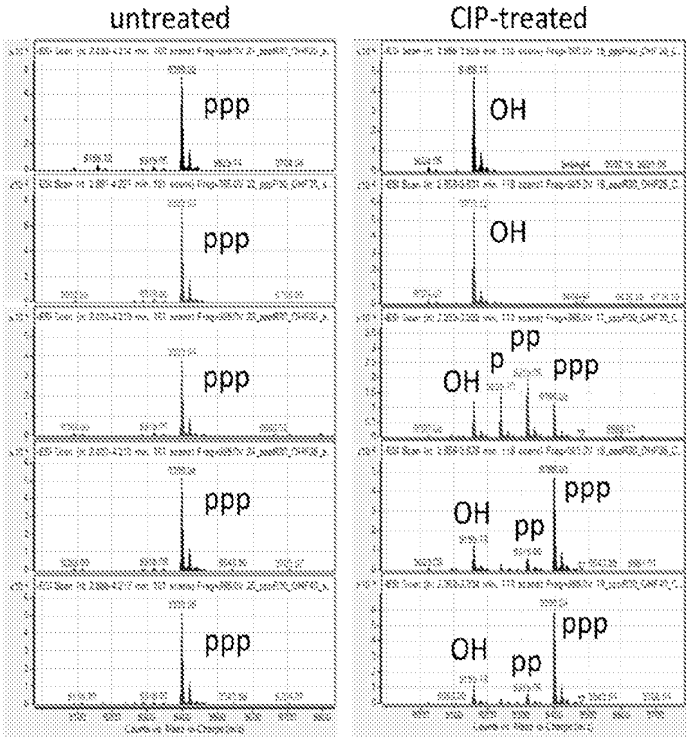


Figure 20.

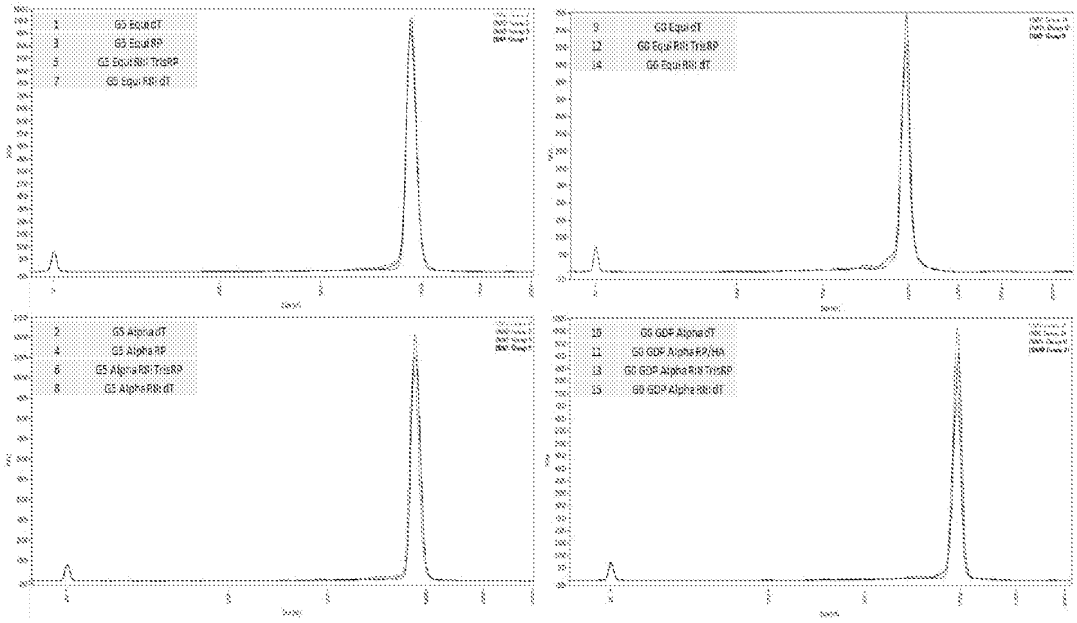

1 G5 EquaCT
3 G5 EquaRP
5 G5 EquaRiN TrisRP
7 G5 EquaRiN dT
9 G5 EquaCT
12 G5 EquaRiN TrisRP
14 G5 EquaRiN dT
2 G5 AlphaCT
4 G5 AlphaRP
6 G5 AlphaRiN TrisRP
8 G5 AlphaRiN dT
10 G5 GDP AlphaCT
11 G5 GDP AlphaRP/HA
13 G5 GDP AlphaRiN TrisRP
15 G5 GDP AlphaRiN dT

Figure 21.

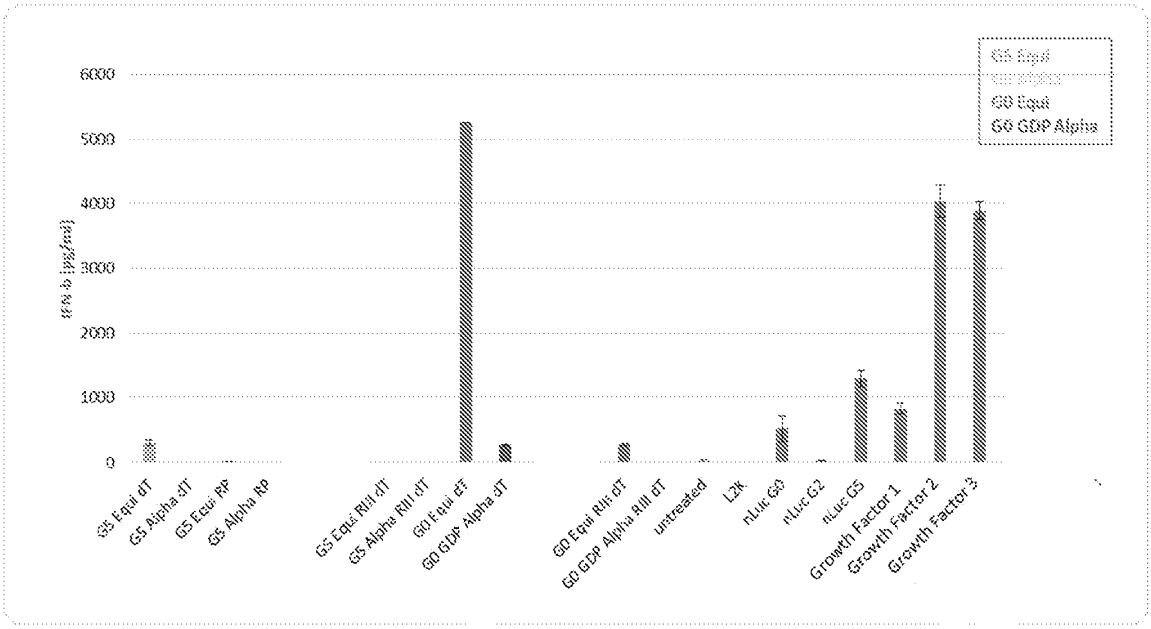

6000
5000
4000
3000
2000
1000
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RII dT
G5 Alpha RII dT
G0 Equi dT
G0 GDP Alpha dT
G0 Equi RII dT
G0 GDP Alpha RII dT
untreated
L2K
nLuc G0
nLuc G2
nLuc G5
Growth Factor 1
Growth Factor 2
Growth Factor 3
G0 Equi
G0 GDP Alpha

Figure 22.

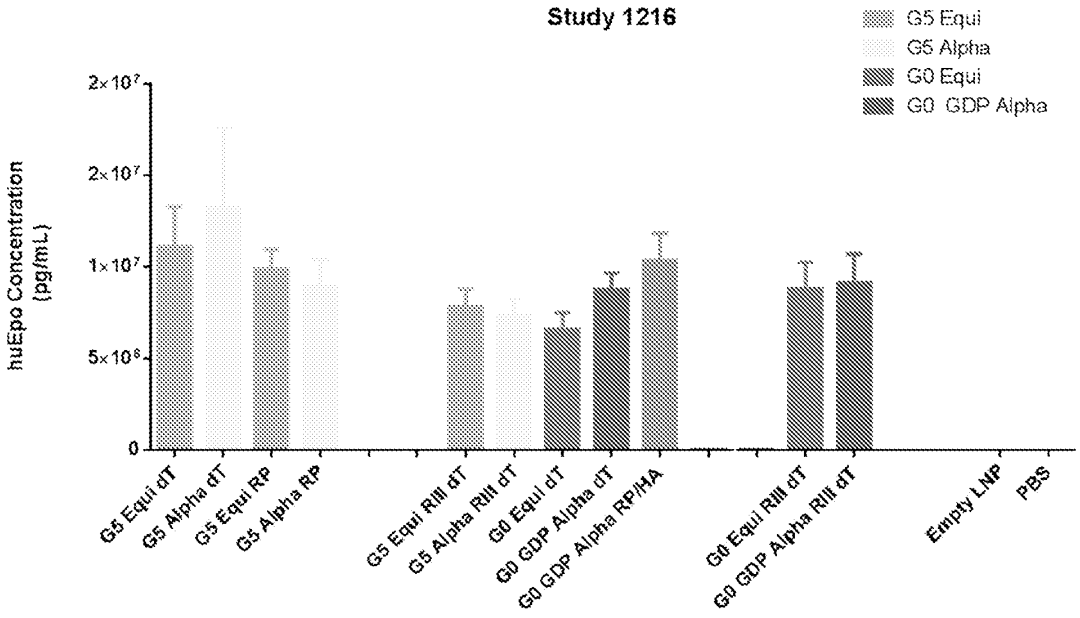

Study 1216
G5 Equi
G5 Alpha
G0 Equi
G0 GDP Alpha
huEpo Concentration (pg/mL)
2×10⁷
2×10⁷
1×10⁷
5×10⁶
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP/HA
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
PBS

Figure 23A.

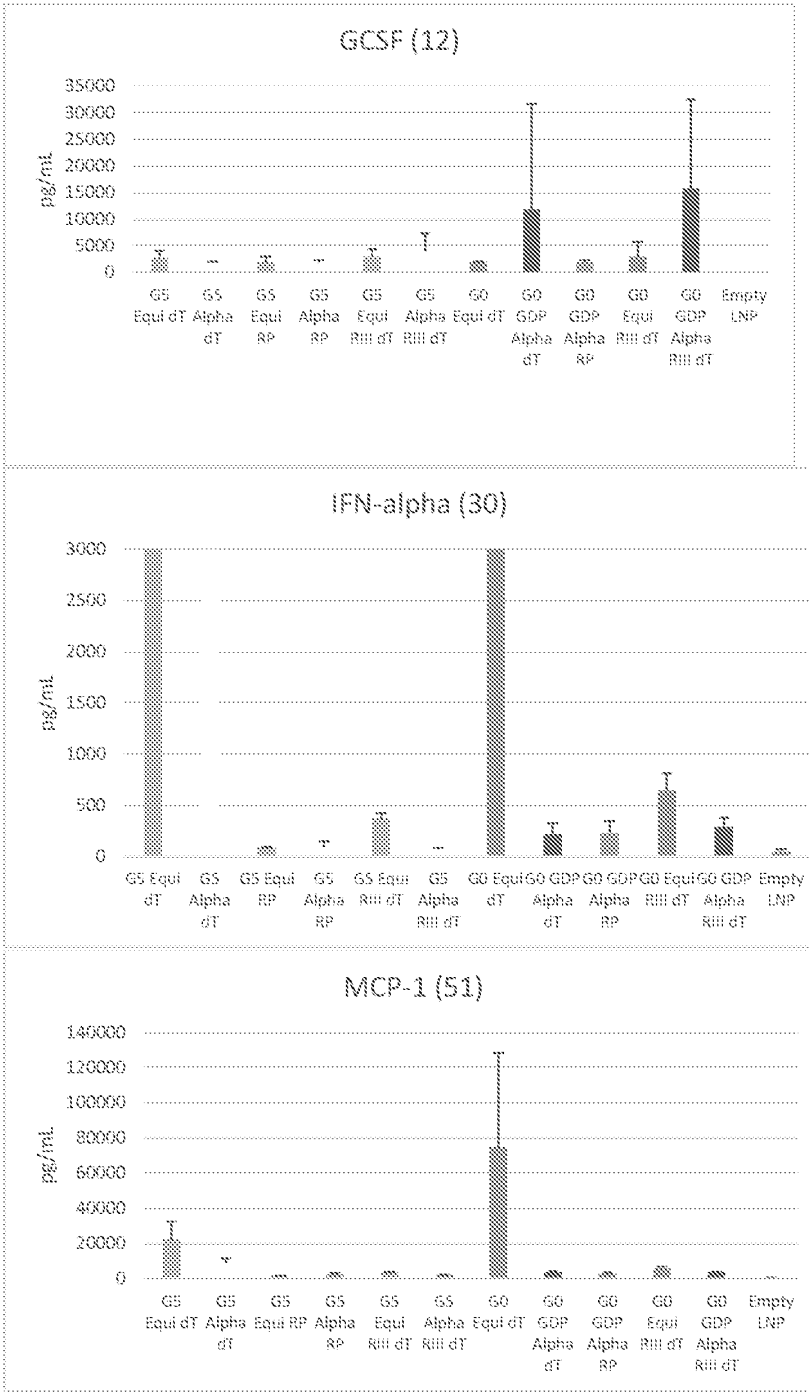

GCSF (12)
pg/mL
35000
30000
25000
20000
15000
10000
5000
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
IFN-alpha (30)
pg/mL
3000
2500
2000
1500
1000
500
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
MCP-1 (51)
pg/mL
140000
120000
100000
80000
60000
40000
20000
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP

Figure 23B.

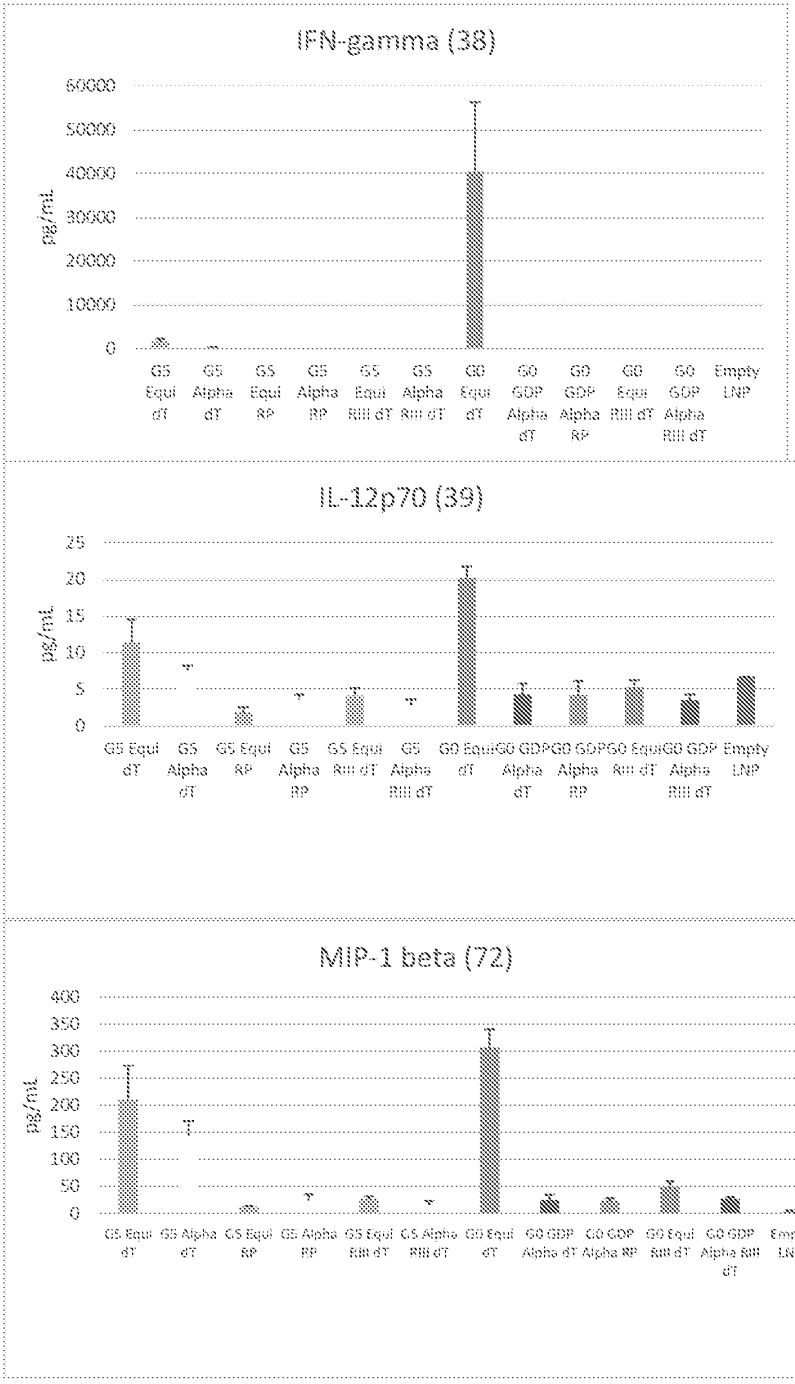

IFN-gamma (38)
pg/mL
60000
50000
40000
30000
20000
10000
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
IL-12p70 (39)
pg/mL
25
20
15
10
5
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
MIP-1 beta (72)
pg/mL
400
350
300
250
200
150
100
50
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP

Figure 23C.

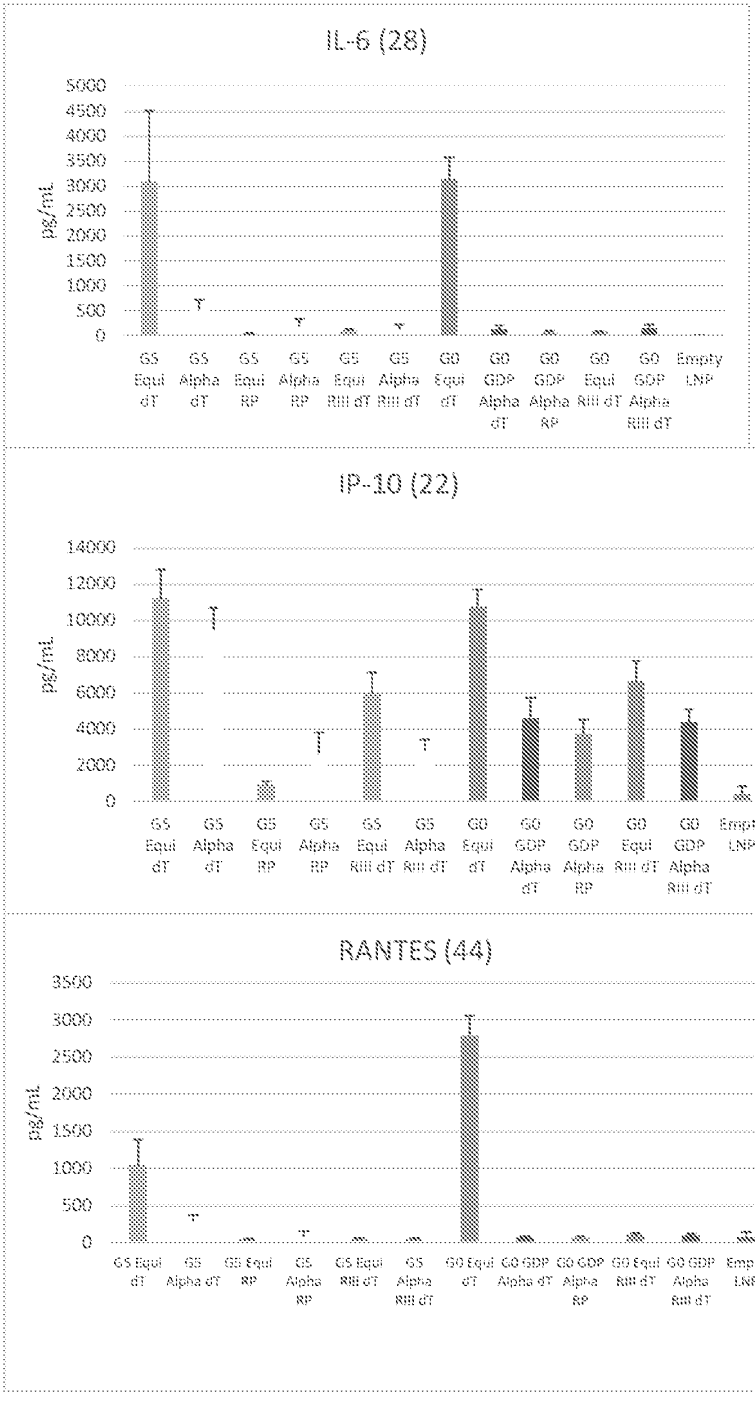

IL-6 (28)
pg/mL
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
IP-10 (22)
pg/mL
14000
12000
10000
8000
6000
4000
2000
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
RANTES (44)
pg/mL
3500
3000
2500
2000
1500
1000
500
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP

Figure 23D.

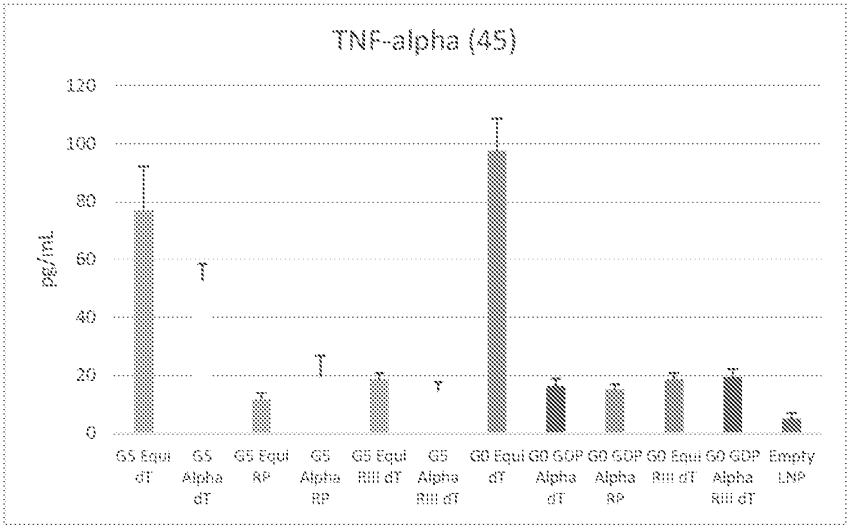

TNF-alpha (45)
pg/mL
120
100
80
60
40
20
0
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP

Figure 24.

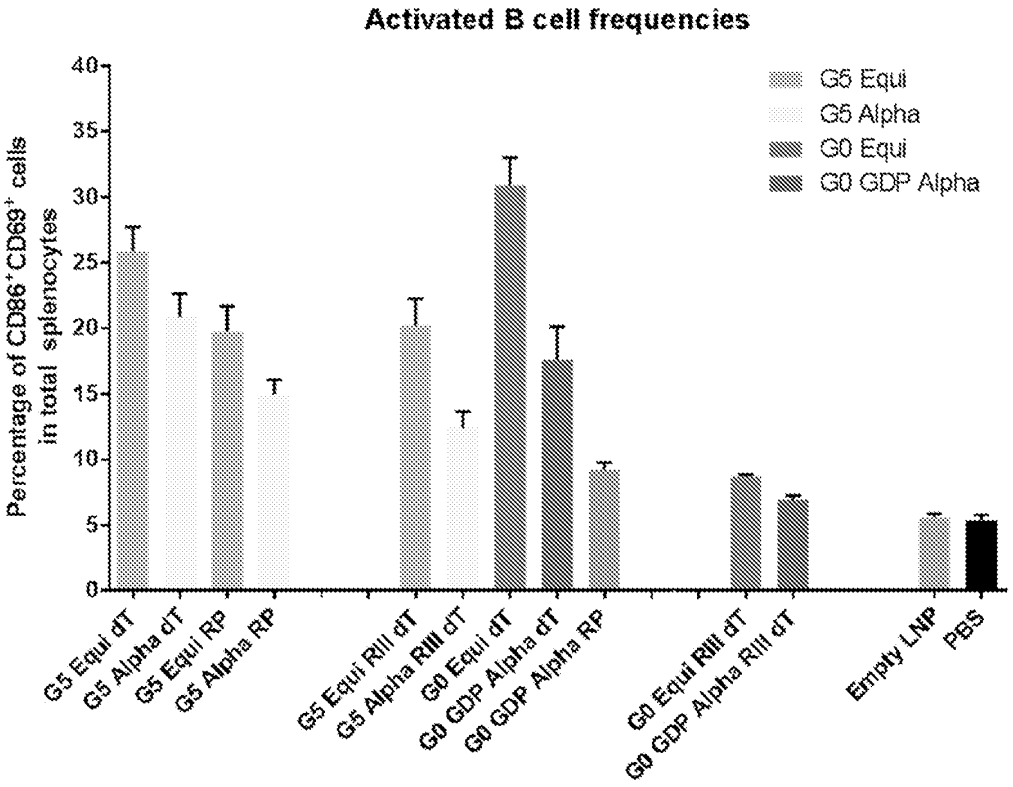

Activated B cell frequencies
Percentage of CD86+CD69+ cells in total splenocytes
40
35
30
25
20
15
10
5
0
G5 Equi
G5 Alpha
G0 Equi
G0 GDP Alpha
G5 Equi dT
G5 Alpha dT
G5 Equi RP
G5 Alpha RP
G5 Equi RIII dT
G5 Alpha RIII dT
G0 Equi dT
G0 GDP Alpha dT
G0 GDP Alpha RP
G0 Equi RIII dT
G0 GDP Alpha RIII dT
Empty LNP
PBS

Figure 25.

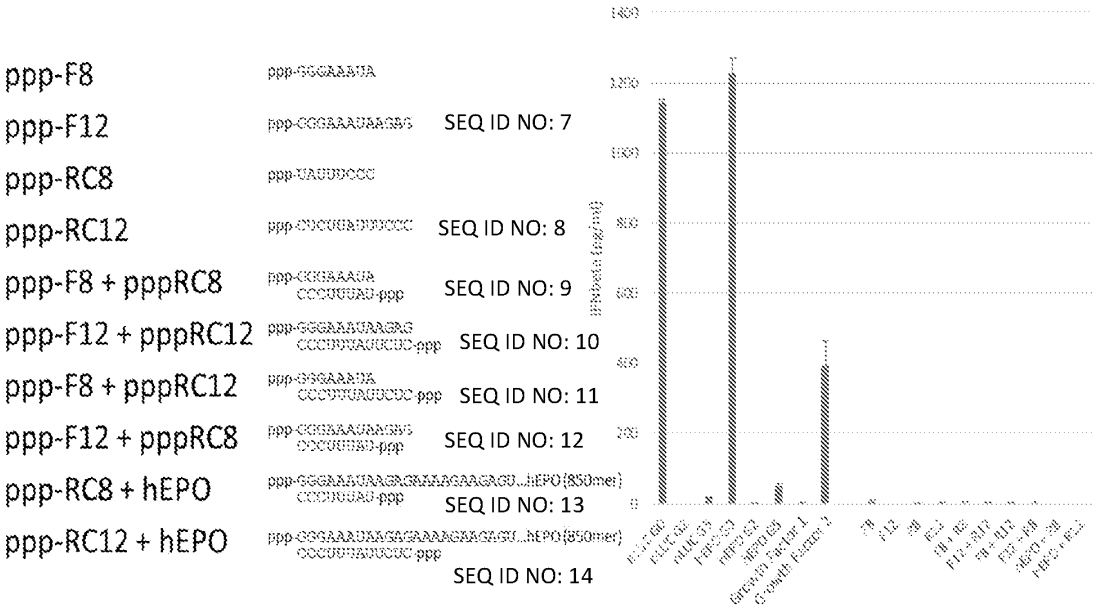

ppp-F8
ppp-F12
ppp-RC8
ppp-RC12
ppp-F8 + pppRC8
ppp-F12 + pppRC12
ppp-F8 + pppRC12
ppp-F12 + pppRC8
ppp-RC8 + hEPO
ppp-RC12 + hEPO
SEQ ID NO: 7
SEQ ID NO: 8
SEQ ID NO: 9
SEQ ID NO: 10
SEQ ID NO: 11
SEQ ID NO: 12
SEQ ID NO: 13
SEQ ID NO: 14

Figure 26.

ppp-F20 + ppp-RC20 (Tm 59.9C)	ppp-GCCUAAACUAAGACGAUGAAAACG CGCGUUGAUUCUGUCGUUUUCGU-ppp	SEQ ID NO: 15
ppp-U16 + OH-A25 (Tm 22.6C)	OH-AAAAAAAAAAAAAAAAAAAAAAAA UUUUUUUUUUUUUUUU-ppp	SEQ ID NO: 16
ppp-U20 + OH-A25 (Tm 31.7C)	OH-AAAAAAAAAAAAAAAAAAAAAAAA UUUUUUUUUUUUUUUUUUUU-ppp	SEQ ID NO: 17
ppp-U25 + OH-A25 (Tm 39C)	OH-AAAAAAAAAAAAAAAAAAAAAAAA UUUUUUUUUUUUUUUUUUUUUUUUU-ppp	SEQ ID NO: 18
ppp-RC20 + C1-RNA surrogate 2	ppp-GCCUAAACUAAGACGAUGAAAACGAUGU...(250mer) CGCGUUGAUUCUGUCGUUUUCGU-ppp	SEQ ID NO: 19

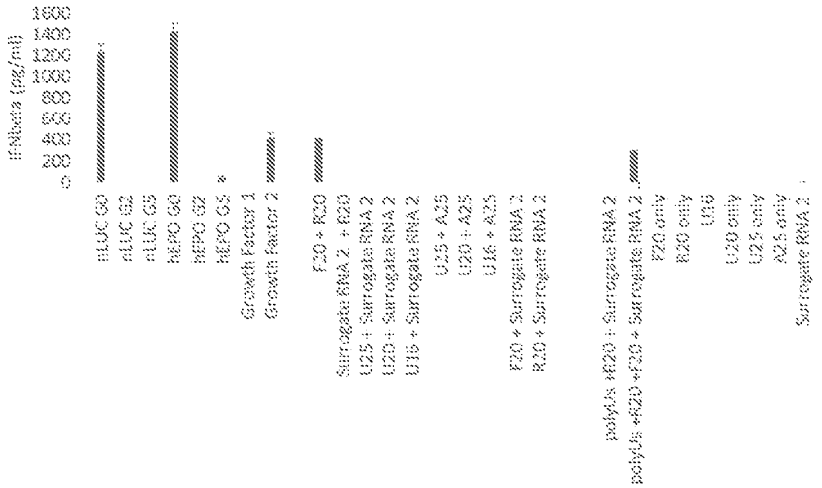


Figure 27.

ppp-F20 + pppR20 (Tm 59.9C)	ppp-GGGAAAUAAGAGAGAAAAGA CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 20
ppp-F20 + OHR20	ppp-GGGAAAUAAGAGAGAAAAGA CCCUUUAUUCUCUCUUUUCU-OH	SEQ ID NO: 21
OH-F20 + pppR20	OH-GGGAAAUAAGAGAGAAAAGA CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 22
OH-F25 + pppR20	OH-GGGAAAUAAGAGAGAAAAGAAGAGU CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 23
OH-F30 + pppR20	OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAA CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 24
OH-F35 + pppR20	OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAAGAAAU CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 25
OH-F40 + pppR20	OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAAGAAAUAUAAG CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 26
OH-F47 + pppR20	OH-GGGAAAUAAGAGAGAAAAGAAGAGUAAGAAGAAAUAUAAGAGCCACC CCCUUUAUUCUCUCUUUUCU-ppp	SEQ ID NO: 27

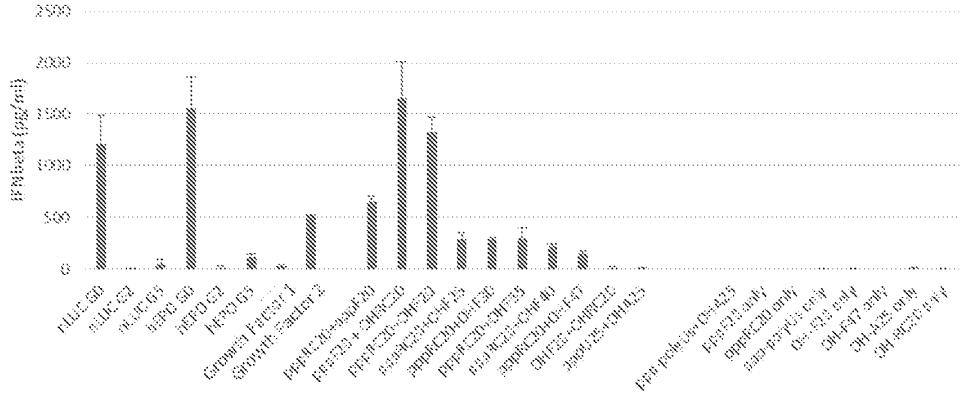


Figure 28.

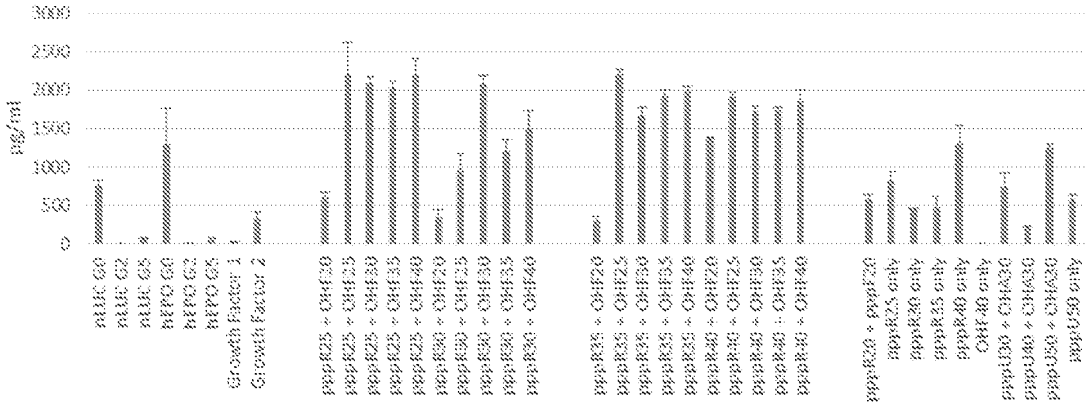

3000
2500
2000
1500
1000
500
0
pg/ml
mAb G6
mAb G2
mAb G5
hFRO G6
hFRO G2
hFRO G5
Growth Factor 1
Growth Factor 2
mAb25 + OH439
mAb25 + OH435
mAb25 + OH430
mAb25 + OH425
mAb25 + OH449
mAb30 + OH439
mAb30 + OH435
mAb30 + OH430
mAb30 + OH425
mAb30 + OH449
mAb35 + OH439
mAb35 + OH425
mAb35 + OH430
mAb35 + OH435
mAb35 + OH449
mAb40 + OH439
mAb40 + OH425
mAb40 + OH430
mAb40 + OH435
mAb40 + OH449
mAb25 + mAb30
mAb25 only
mAb30 only
mAb35 only
mAb40 only
OH439 only
mAb30 + OH439
mAb30 + OH430
mAb30 + OH425
mAb30 only

Figure 29.

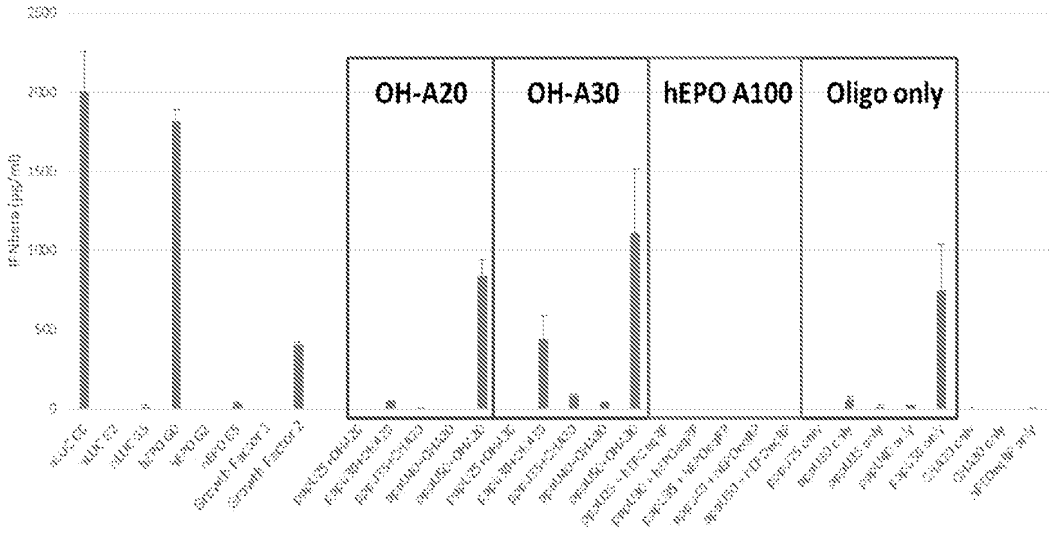
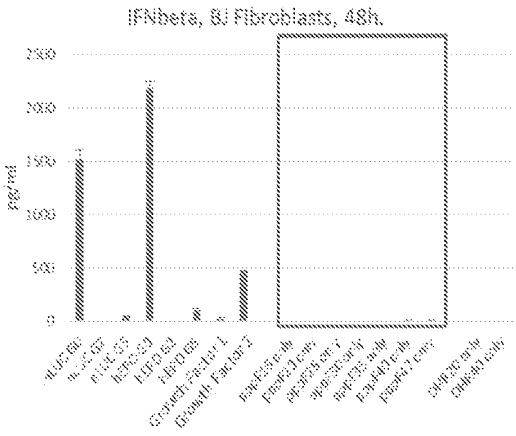


Figure 30.

pppFwd oligos



pppRC oligos

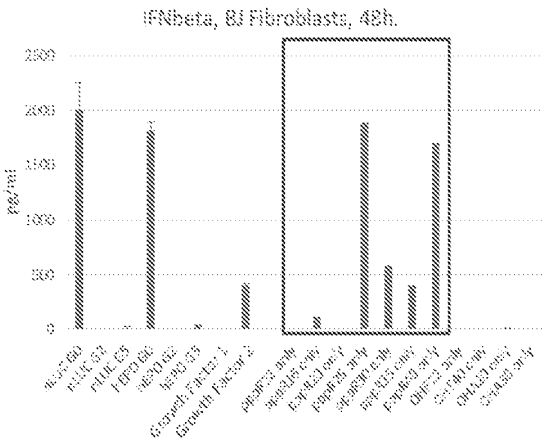


Figure 31.

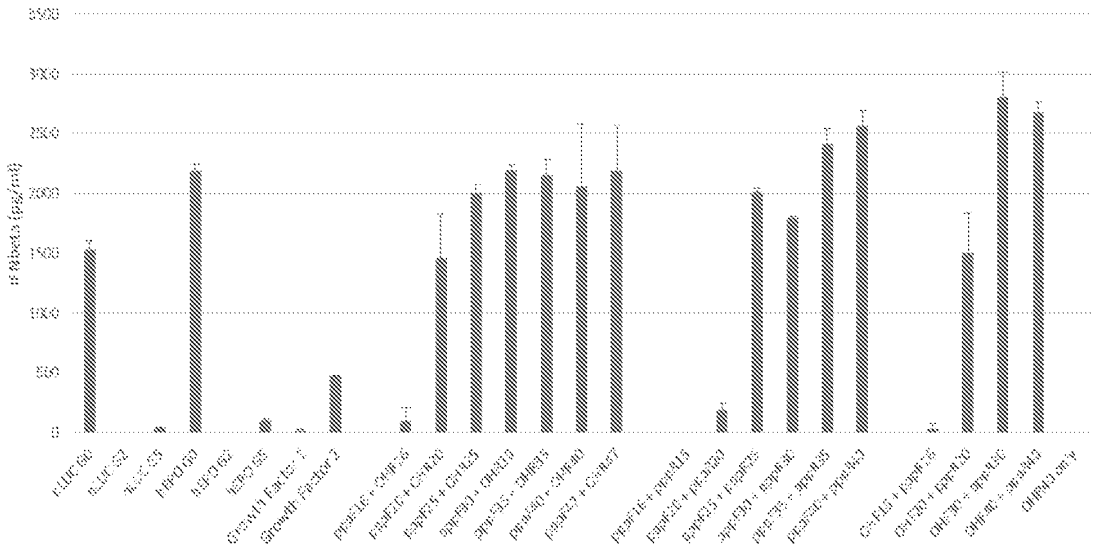
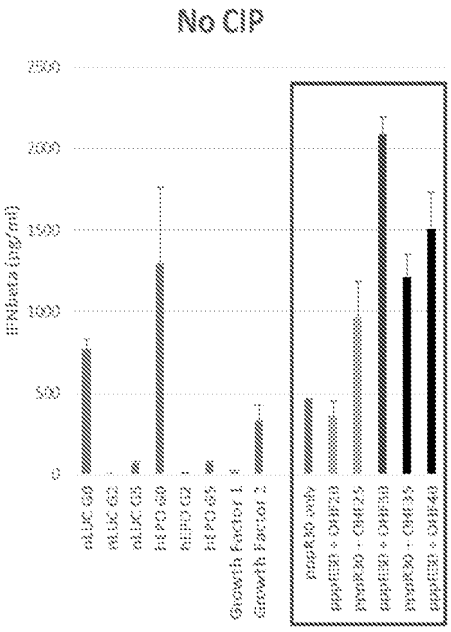


Figure 32.


No CIP
EPO/Meta (mg/ml)
2500
2000
1500
1000
500
0
mAbC 60
mAbC 62
mAbC 65
hEPO 60
hEPO 62
hEPO 65
Growth Factor 1
Growth Factor 2
peptide only
peptide + OM60
peptide + OM62
peptide + OM65
peptide60 + OM60
peptide62 + OM62

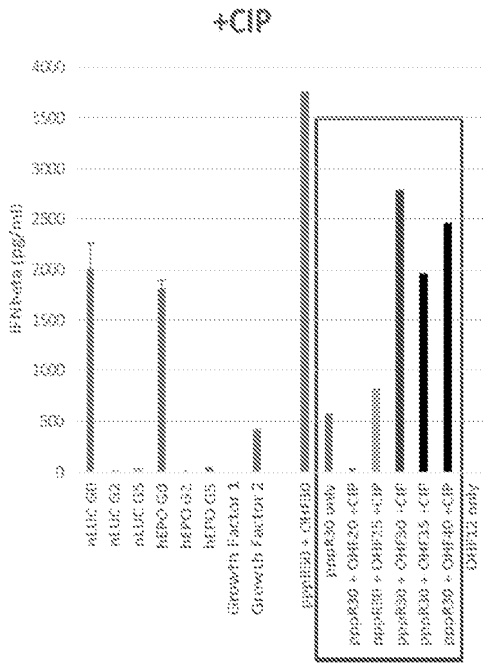

+CIP
EPO/Meta (mg/ml)
4000
3500
3000
2500
2000
1500
1000
500
0
mAbC 60
mAbC 62
mAbC 65
hEPO 60
hEPO 62
hEPO 65
Growth Factor 1
Growth Factor 2
peptide + OM60
peptide only
peptide + OM60 +CIP
peptide + OM62 +CIP
peptide + OM65 +CIP
peptide60 + OM60 +CIP
peptide62 + OM62 +CIP

Figure 33.

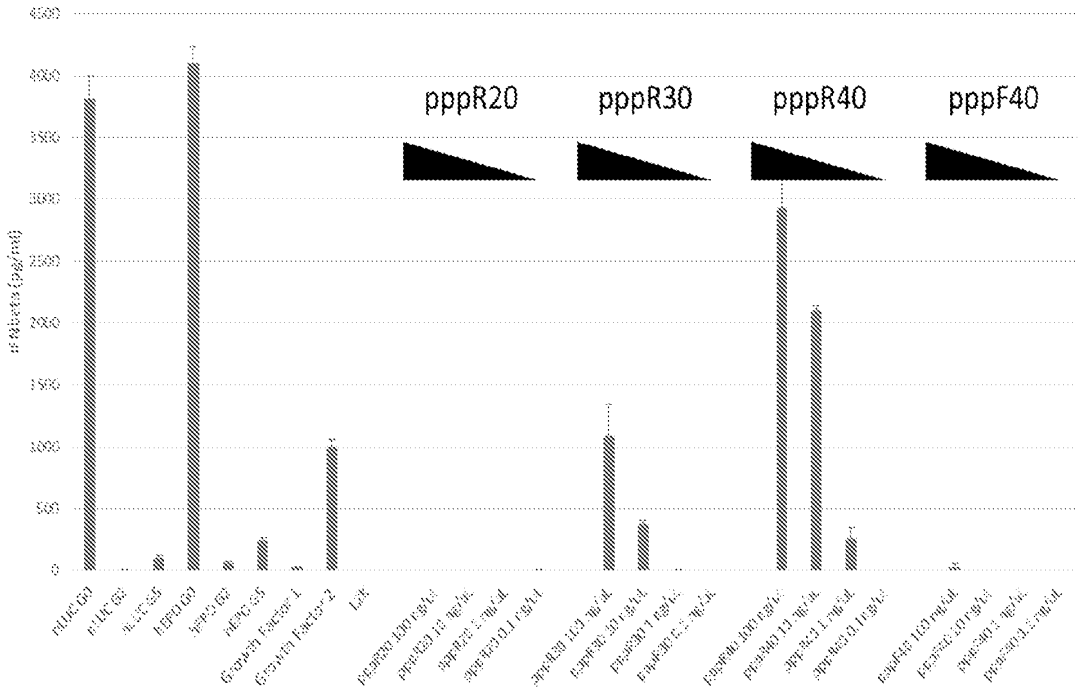


Figure 34.

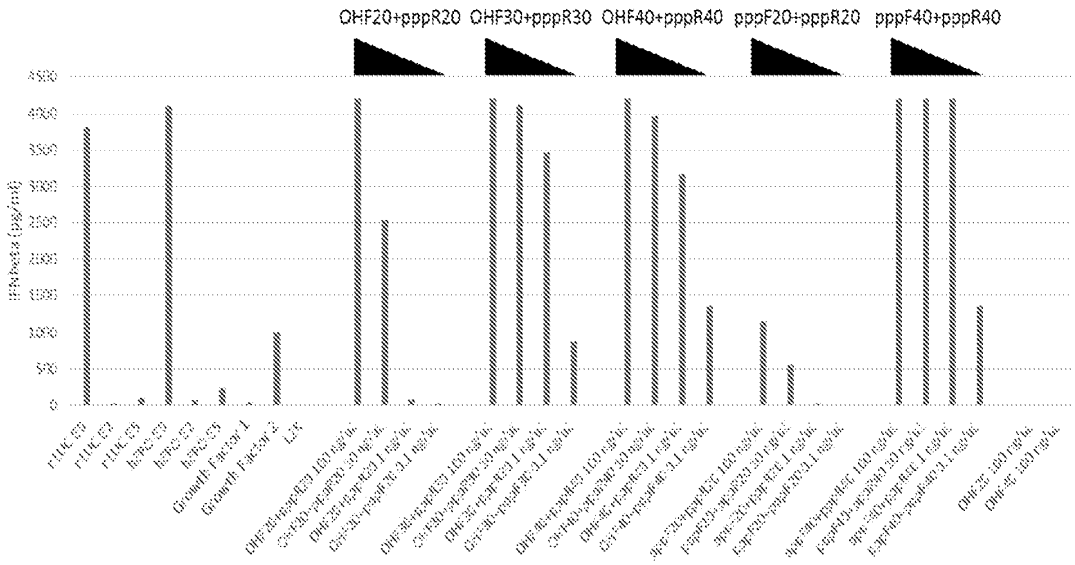
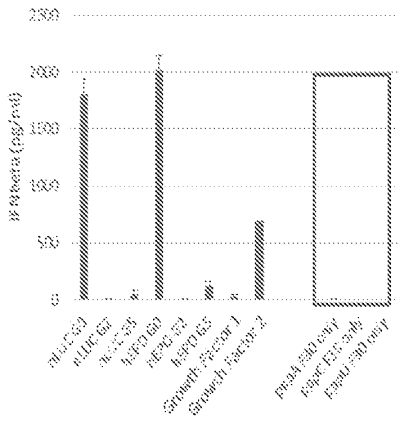
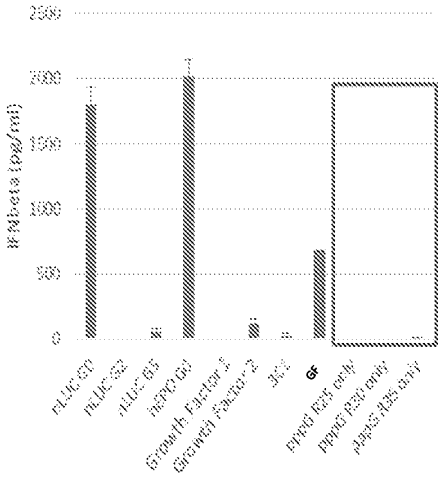

OHF20+pppR20
OHF30+pppR30
OHF40+pppR40
pppF20+pppR20
pppF40+pppR40

Figure 35.



Oligo	Sequence (5' -> 3')	
AF30	AGGGAAAUAAGAGAGAAAAGAAGAGUAAGAA	SEQ ID NO: 28
CF30	CGGGAAAUAAGAGAGAAAAGAAGAGUAAGAA	SEQ ID NO: 29
UF30	UGGGAAAUAAGAGAGAAAAGAAGAGUAAGAA	SEQ ID NO: 30

Figure 36.



Oligo	Sequence (5' → 3')
GR25	GACUCUUCUUUUCUCUCUUAUUUCCC
GR30	GUUCUUACUCUUCUUUUCUCUCUUAUUUCCC
GR35	GAUUUCUUCUUACUCUUCUUUUCUCUCUUAUUUCCC

Figure 37.

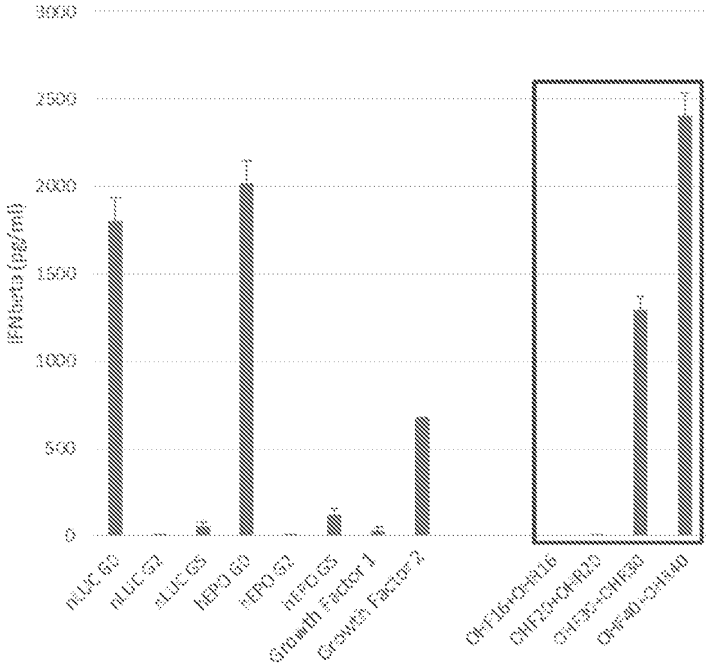


Figure 38.

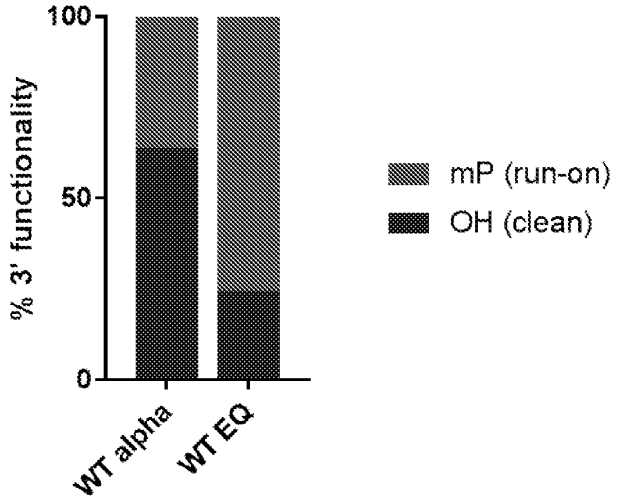


Figure 39.

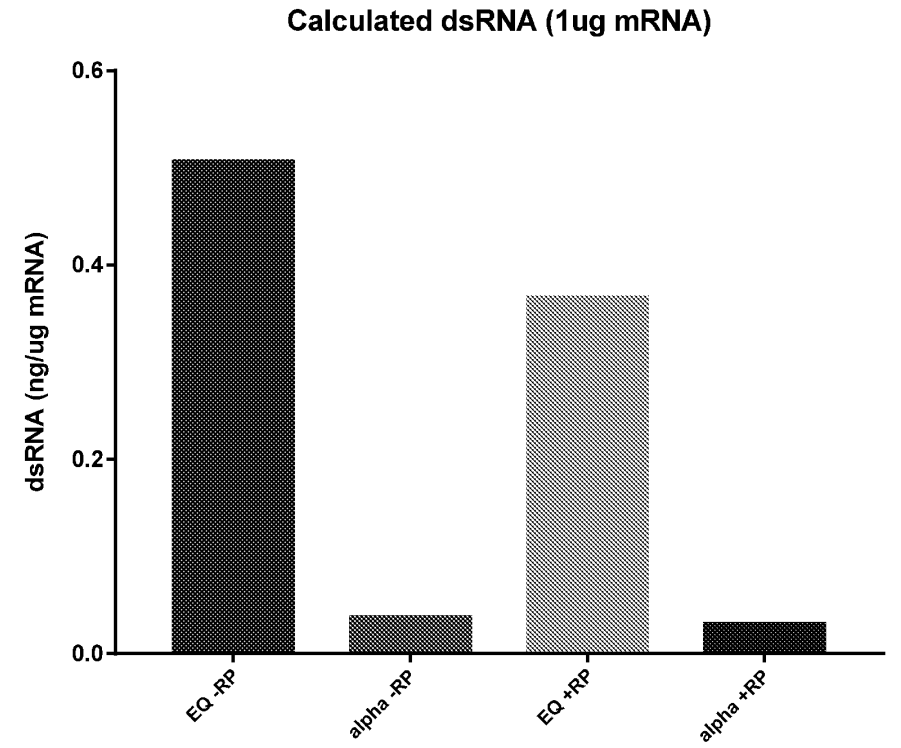
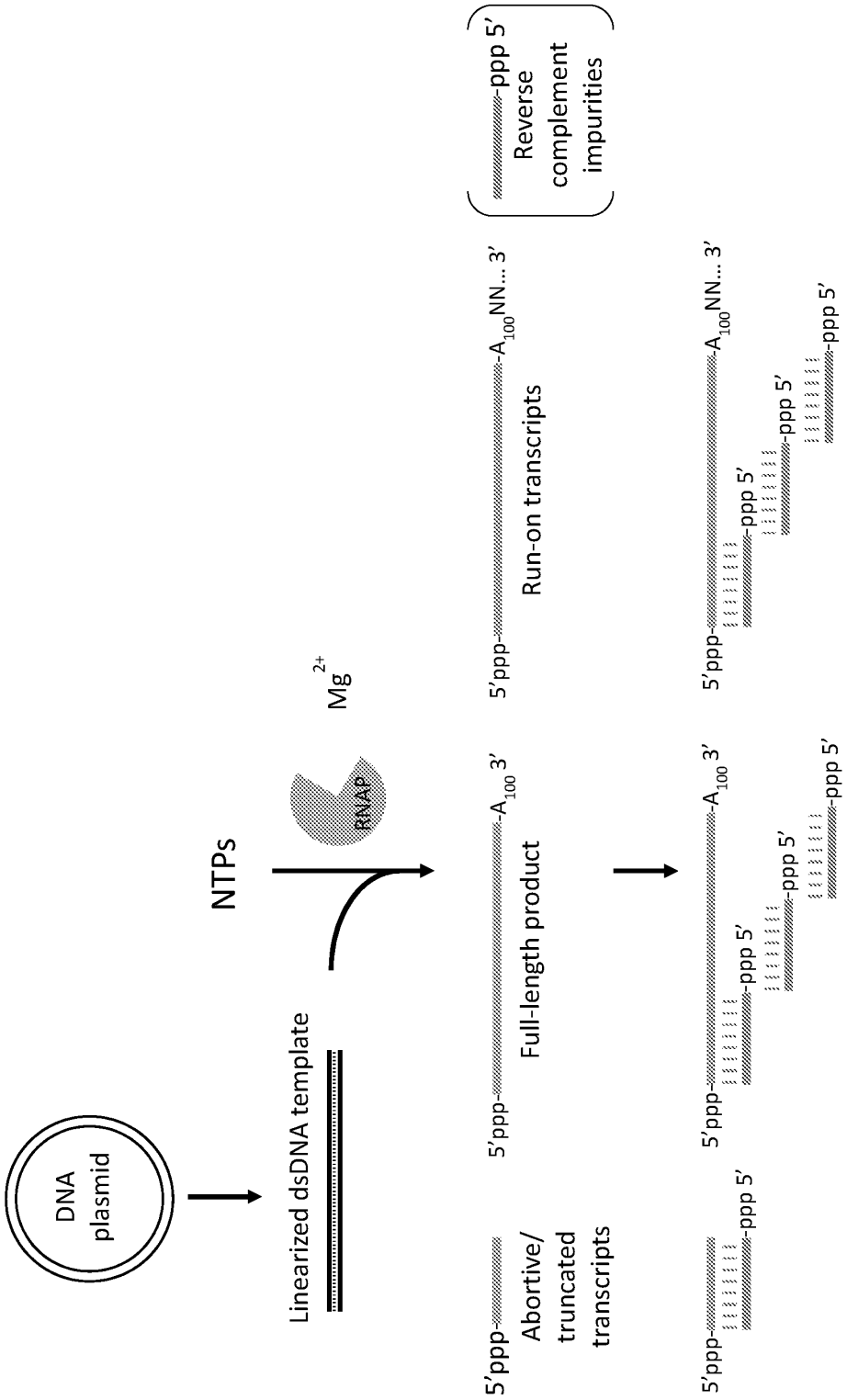

Calculated dsRNA (1ug mRNA)
dsRNA (ng/ug mRNA)
0.6
0.4
0.2
0.0
EQ -RP
alpha -RP
EQ +RP
alpha +RP

Figure 40.


DNA plasmid
Linearized dsDNA template
NTPs
RNAP
Mg^{2+}
5'ppp- Abortive/ truncated transcripts
5'ppp- -A_{100} 3' Full-length product
5'ppp- -A_{100}NN... 3' Run-on transcripts
-ppp 5' Reverse complement impurities