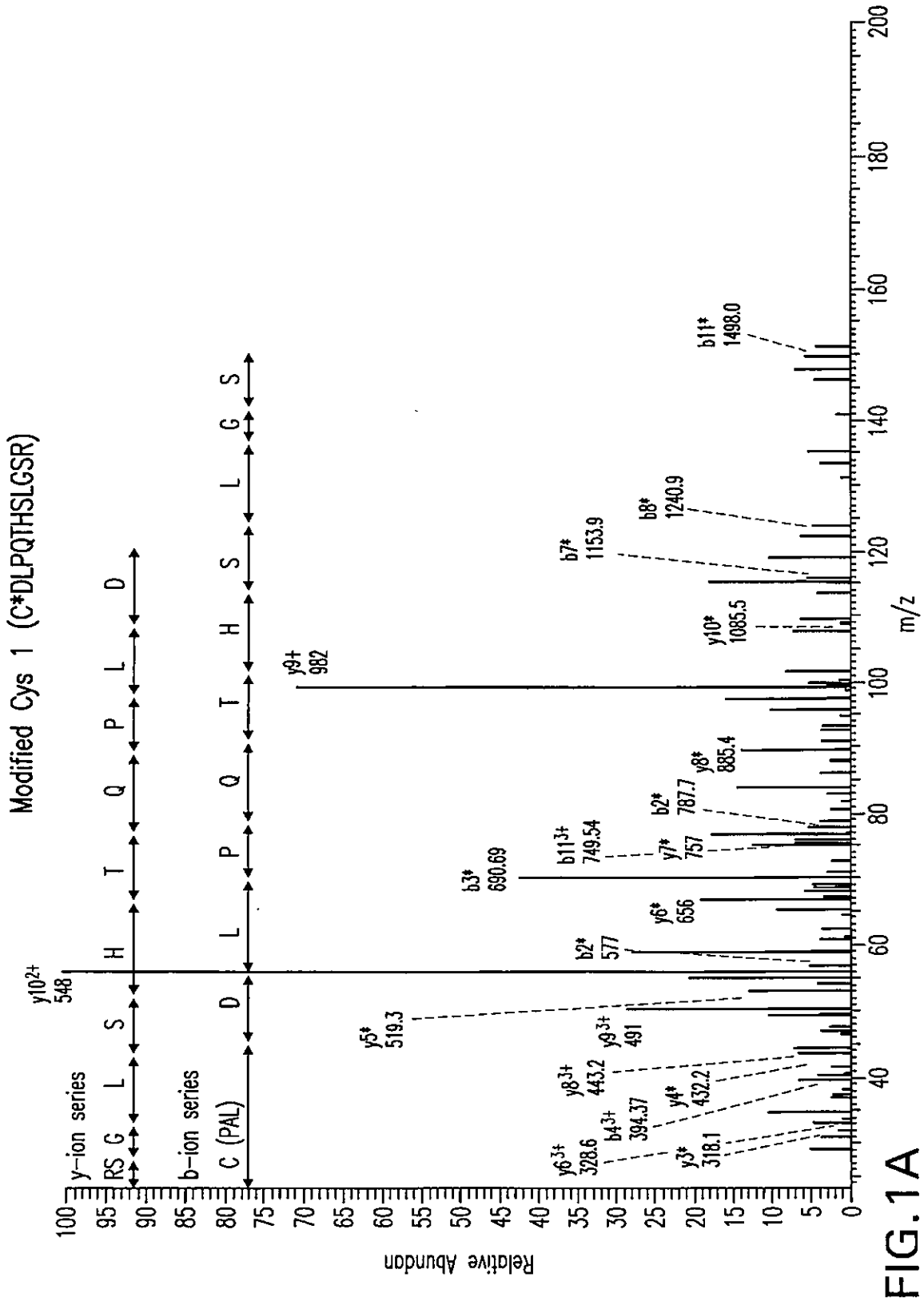

Modified Cys 1 (C*DLPQTHSLGSR)
y-ion series
b-ion series
RS G L S H T Q P L D
C (PAL) D L P Q T H S L G S
y10 2+ 548
y9+ 982
b3* 690.69
b11 3+ 749.54
b2* 577
y6* 656
y7* 757
b2* 787.7
y8* 885.4
y5* 519.3
y9 3+ 491
y8 3+ 443.2
y4* 432.2
b4 3+ 394.37
y6 3+ 328.6
y3* 318.1
b7* 1153.9
b8* 1240.9
y10* 1085.5
b11* 1498.0
Relative Abundan
m/z

FIG. 1A

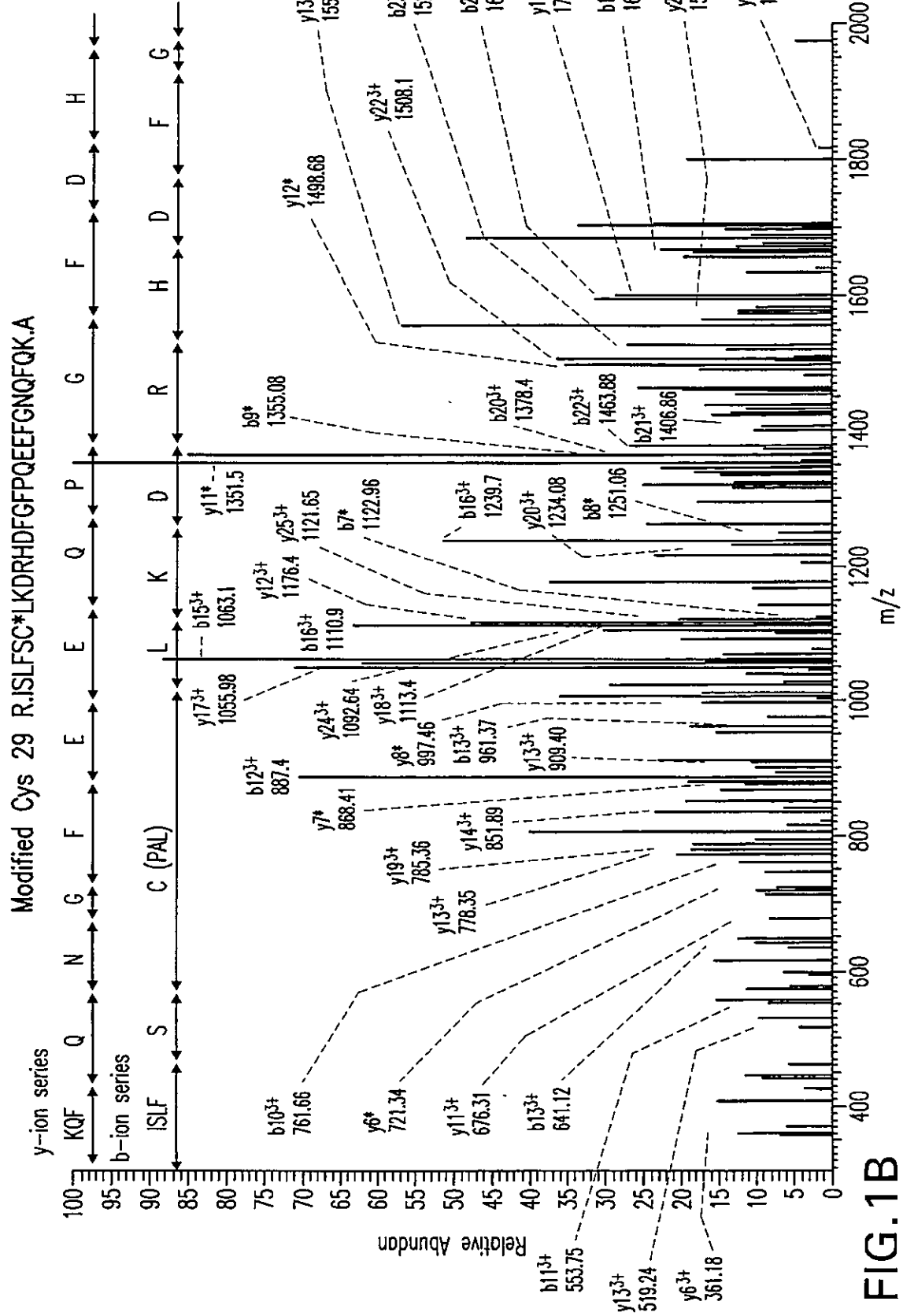

Modified Cys 29 R.ISLFSC*LKDRHDFGFPQEEFGNQFQK.A
y-ion series
b-ion series
K Q F
I S L F S C (PAL) L K D R H D F G F P Q E E F G N Q F Q K A
Relative Abundan
m/z
b10³⁺ 761.66
y6⁺ 721.34
y11³⁺ 676.31
b13³⁺ 641.12
b11³⁺ 553.75
y13³⁺ 519.24
y6³⁺ 361.18
y19³⁺ 785.36
y13³⁺ 778.35
y14³⁺ 851.89
y7⁺ 868.41
b12²⁺ 887.4
y17³⁺ 1055.98
y24³⁺ 1092.64
y8⁺ 997.46
y18³⁺ 1113.4
b13³⁺ 961.37
y13²⁺ 909.40
b15³⁺ 1063.1
b16³⁺ 1110.9
y12²⁺ 1176.4
y25³⁺ 1121.65
b7⁺ 1122.96
y11⁺ 1351.5
b9⁺ 1355.08
b16³⁺ 1239.7
y20³⁺ 1234.08
b8⁺ 1251.06
b20³⁺ 1378.4
b22³⁺ 1463.88
b21³⁺ 1406.86
y12⁺ 1498.68
y13⁺ 1555.5
y22³⁺ 1508.1
b23³⁺ 1527.91
b24³⁺ 1601.45
y14⁺ 1702.8
b11⁺ 1659.24
y23³⁺ 1561.92
y15⁺ 1817.0

FIG. 1B

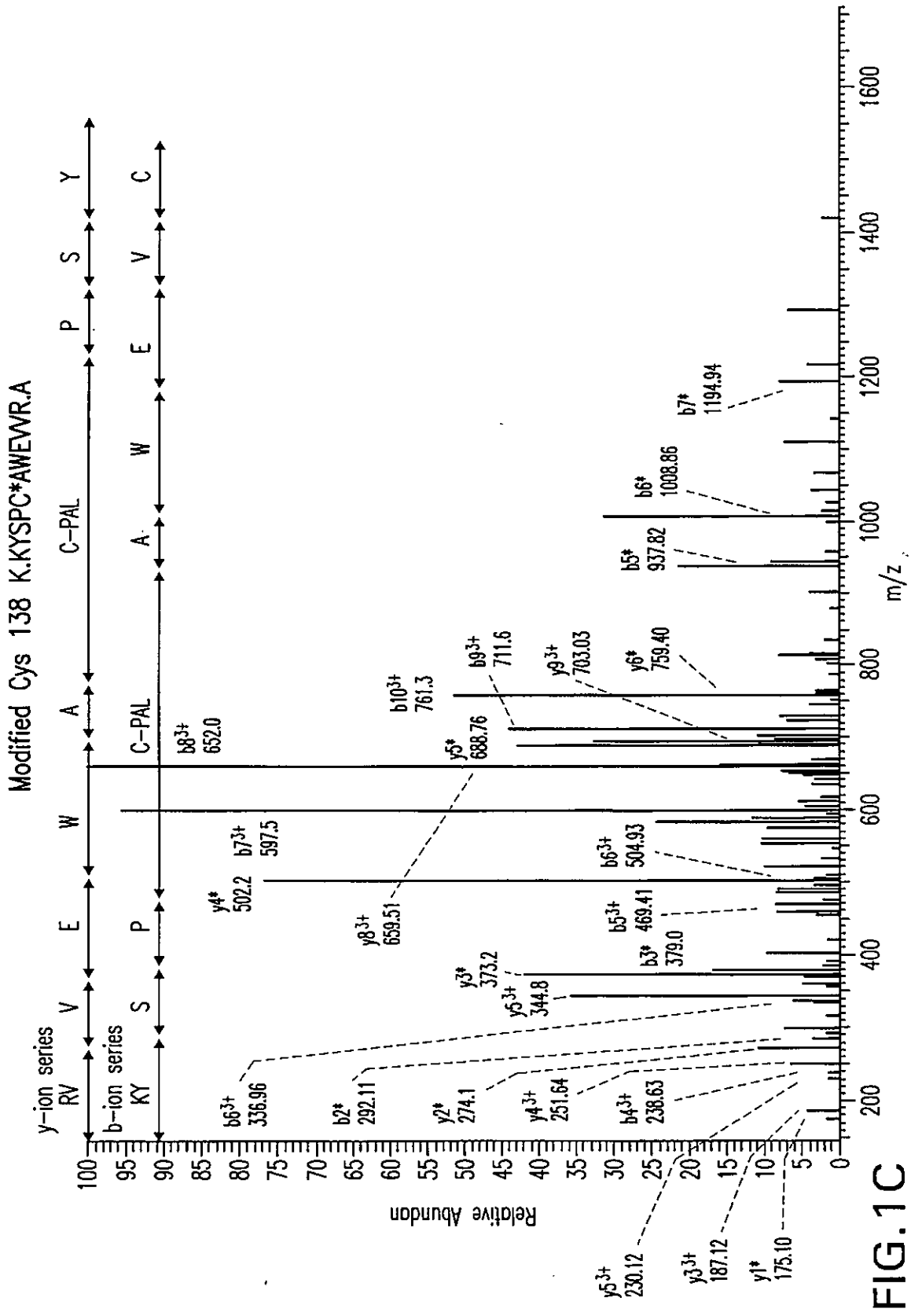

Modified Cys 138 K.KYSPC*AWEVVR.A
y-ion series
RV
V
E
W
A
C-PAL
P
S
Y
b-ion series
KY
S
P
E
W
A
C-PAL
A
W
E
P
V
S
C
Relative Abundan
m/z
b8 3+ 652.0
b10 3+ 761.3
b9 3+ 711.6
y3 3+ 703.03
y6* 759.40
y5* 688.76
b7 3+ 597.5
y4* 502.2
b6 3+ 504.93
y8 3+ 659.51
b5 3+ 469.41
b3* 379.0
y3* 373.2
y5 3+ 344.8
b5* 937.82
b6* 1008.86
b7* 1194.94
b6 3+ 336.96
b2* 292.11
y2* 274.1
y4 3+ 251.64
b4 3+ 238.63
y5 3+ 230.12
y3 3+ 187.12
y1* 175.10

FIG.1C

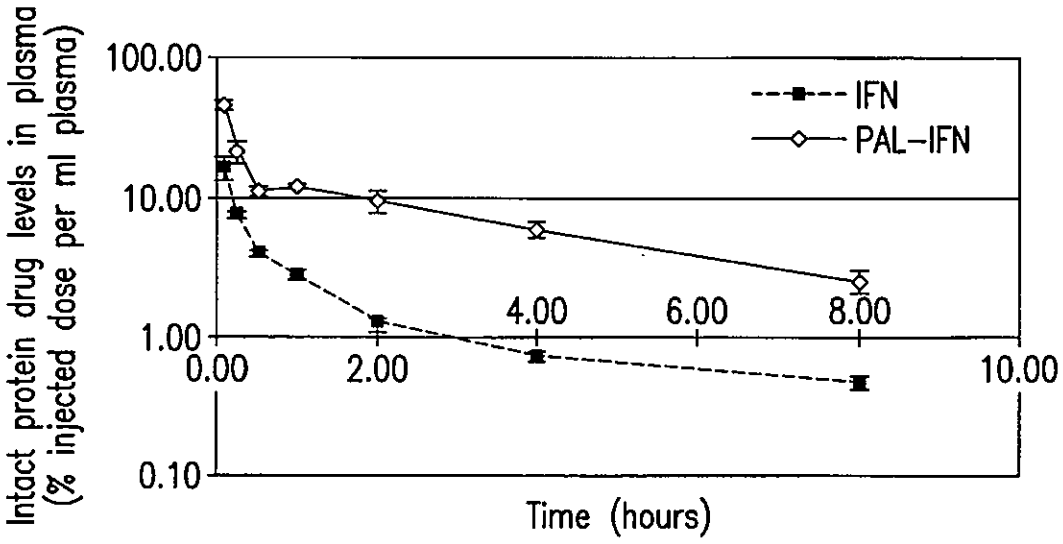

Intact protein drug levels in plasma
(% injected dose per ml plasma)
100.00
10.00
1.00
0.10
0.00
2.00
4.00
6.00
8.00
10.00
IFN
PAL-IFN
Time (hours)

FIG.2

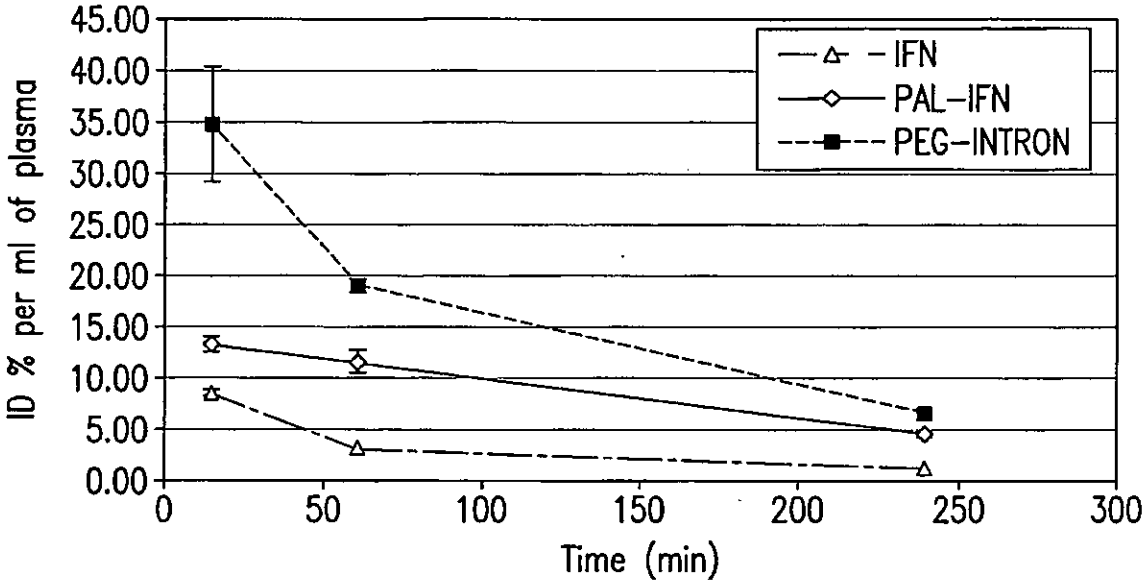

45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
ID % per ml of plasma
0
50
100
150
200
250
300
Time (min)
IFN
PAL-IFN
PEG-INTRON

FIG.3A

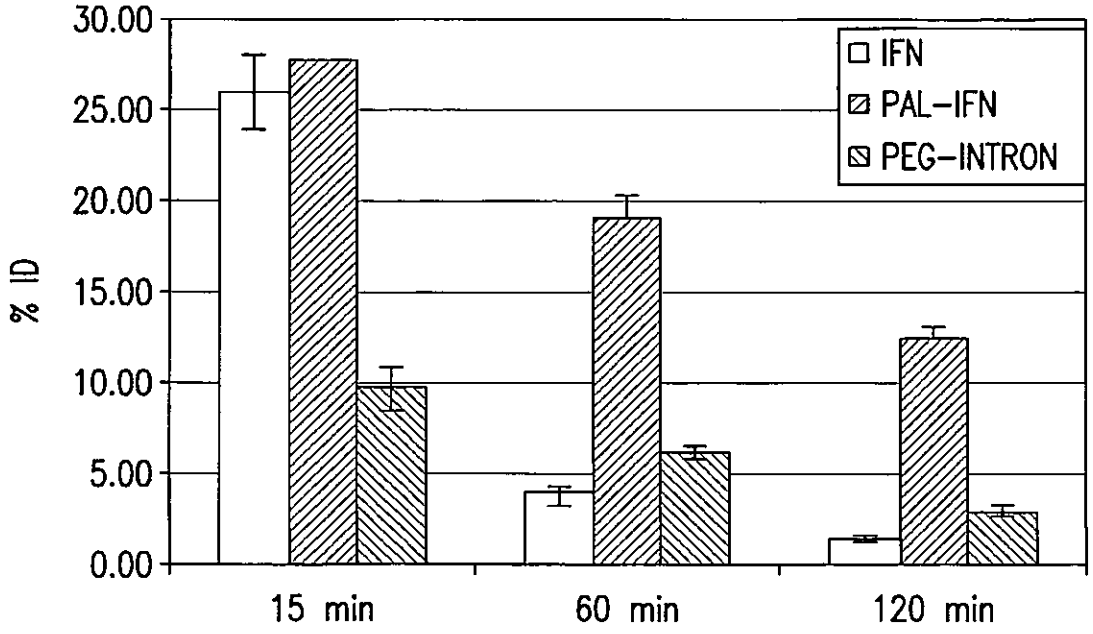

30.00
25.00
20.00
15.00
10.00
5.00
0.00
% ID
15 min
60 min
120 min
IFN
PAL-IFN
PEG-INTRON

FIG.3B

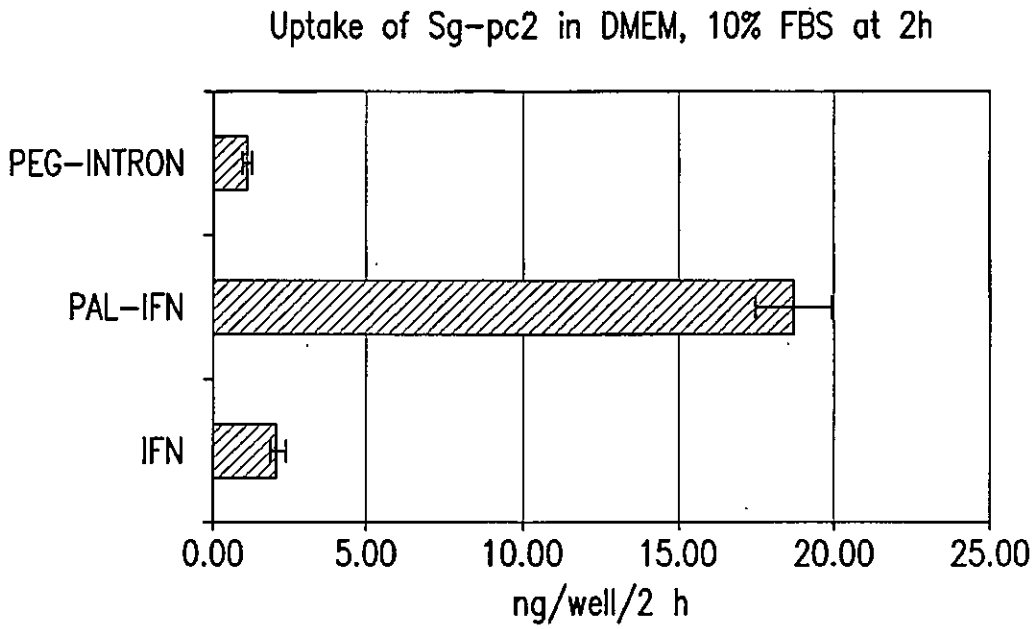

Uptake of Sg-pc2 in DMEM, 10% FBS at 2h
PEG-INTRON
PAL-IFN
IFN
0.00
5.00
10.00
15.00
20.00
25.00
ng/well/2 h

FIG.4A

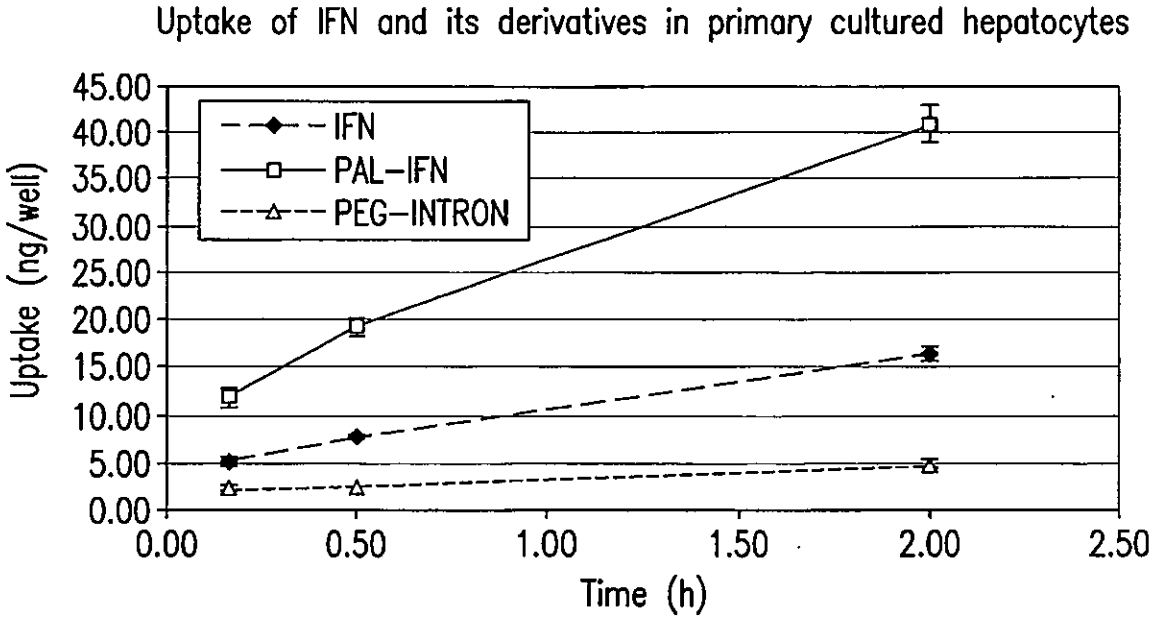

Uptake of IFN and its derivatives in primary cultured hepatocytes
Uptake (ng/well)
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
IFN
PAL-IFN
PEG-INTRON
0.00
0.50
1.00
1.50
2.00
2.50
Time (h)

FIG.4B

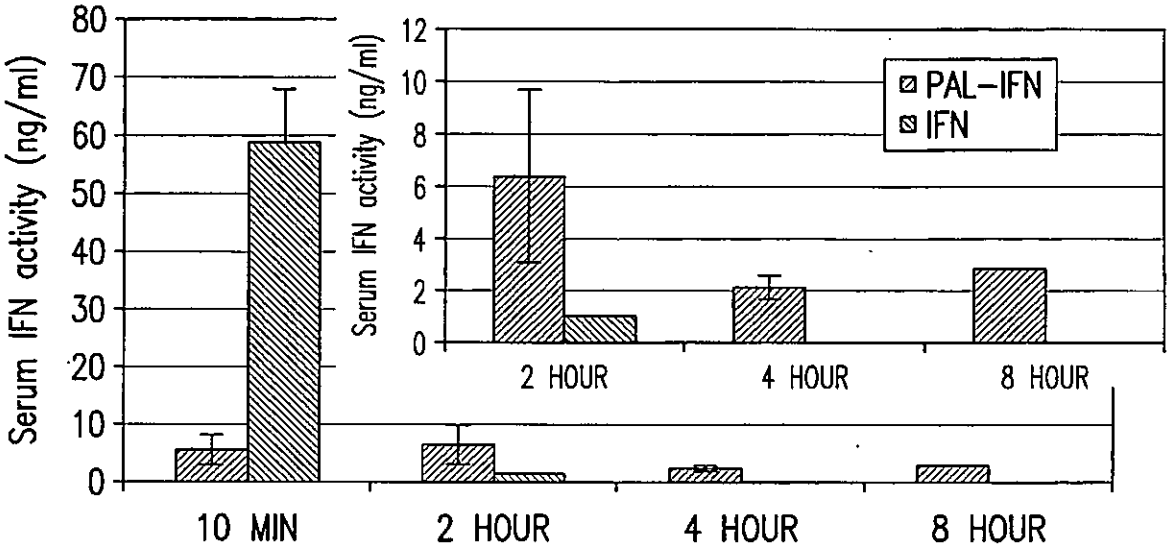

Serum IFN activity (ng/ml)
80
70
60
50
40
30
20
10
0
10 MIN
2 HOUR
4 HOUR
8 HOUR
Serum IFN activity (ng/ml)
12
10
8
6
4
2
0
2 HOUR
4 HOUR
8 HOUR
PAL-IFN
IFN

FIG.5

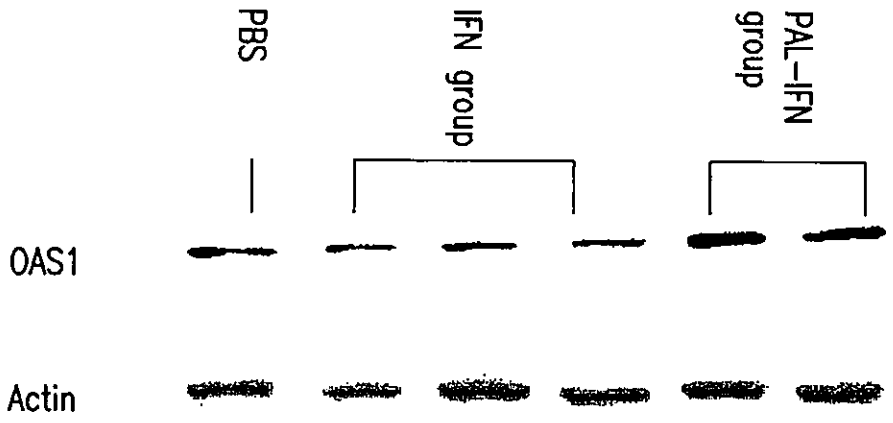

PBS
IFN group
PAL-IFN group
OAS1
Actin

FIG.6A

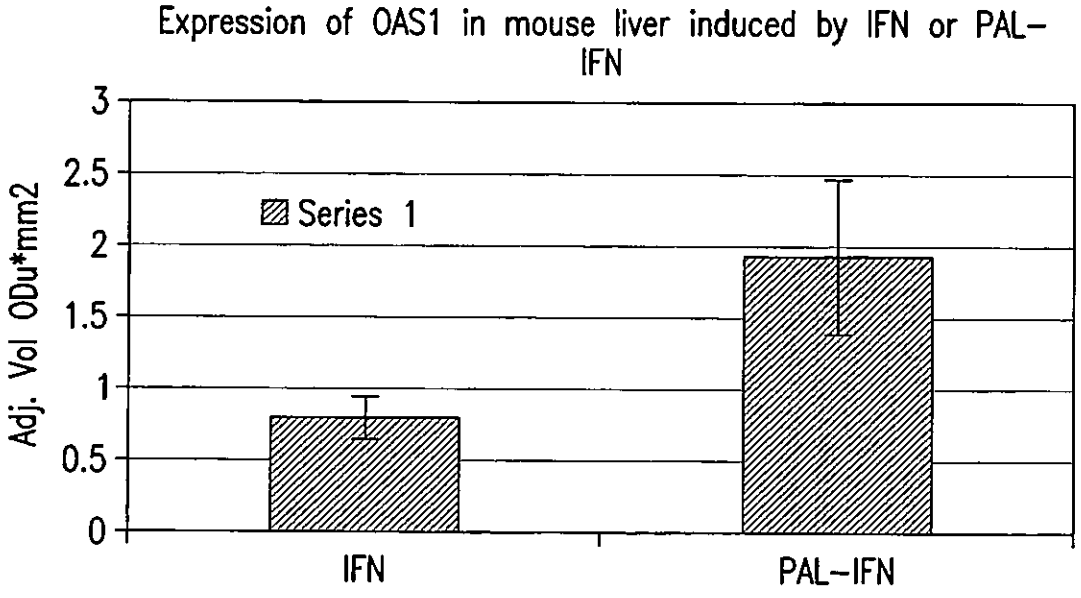

Expression of OAS1 in mouse liver induced by IFN or PAL-IFN
Adj. Vol ODu*mm2
3
2.5
2
1.5
1
0.5
0
Series 1
IFN
PAL-IFN

FIG.6B

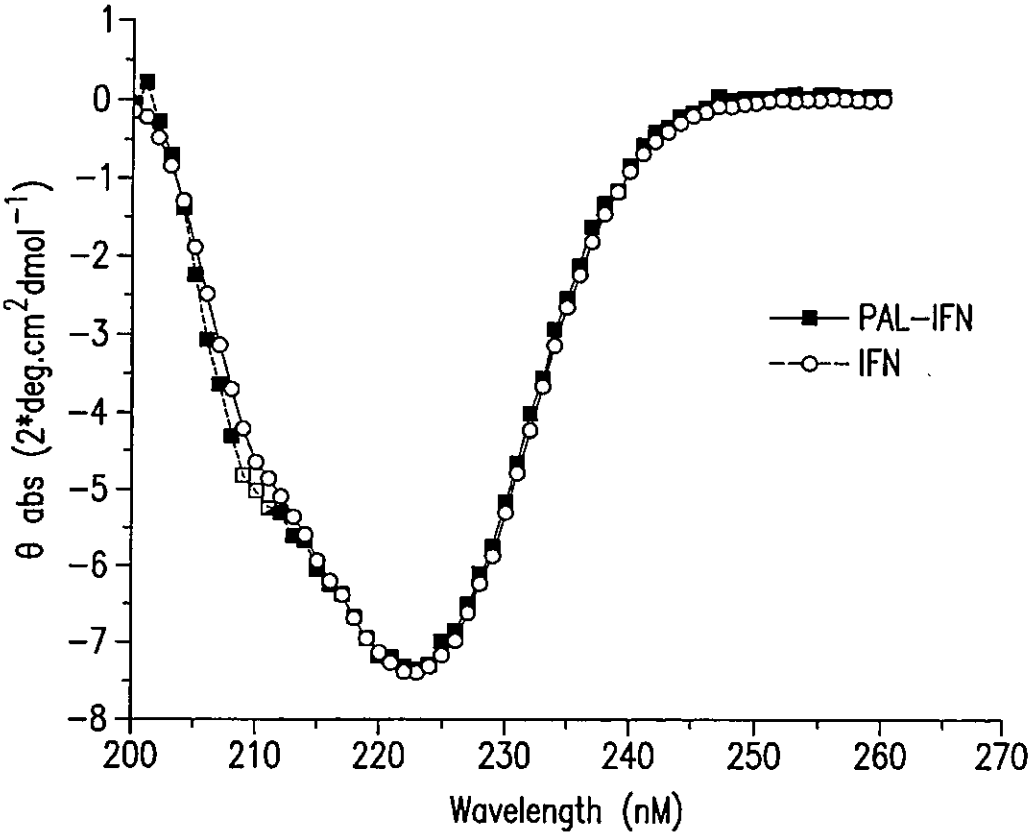

θ abs (2*deg.cm^{2}dmol^{-1})
1
0
−1
−2
−3
−4
−5
−6
−7
−8
200
210
220
230
240
250
260
270
Wavelength (nM)
PAL−IFN
IFN

FIG.7