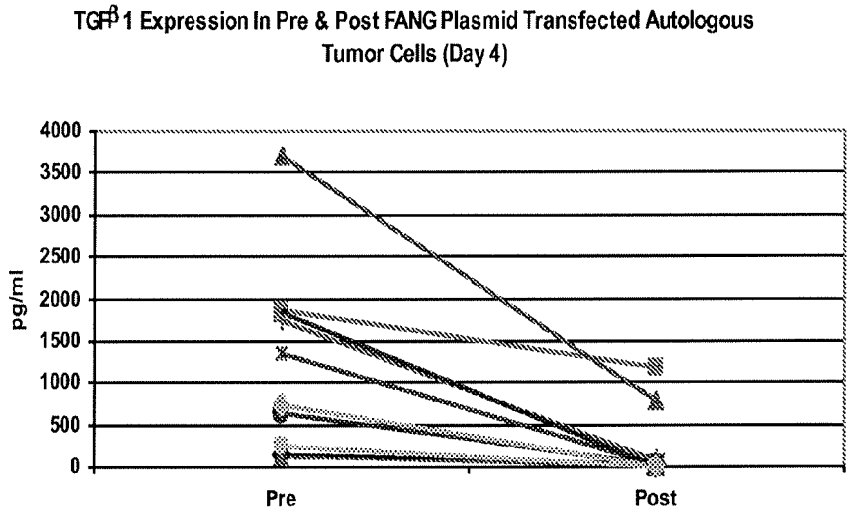

TGFβ1 Expression In Pre & Post FANG Plasmid Transfected Autologous Tumor Cells (Day 4)
4000
3500
3000
2500
2000
1500
1000
500
0
pg/ml
Pre
Post

FIG. 1A

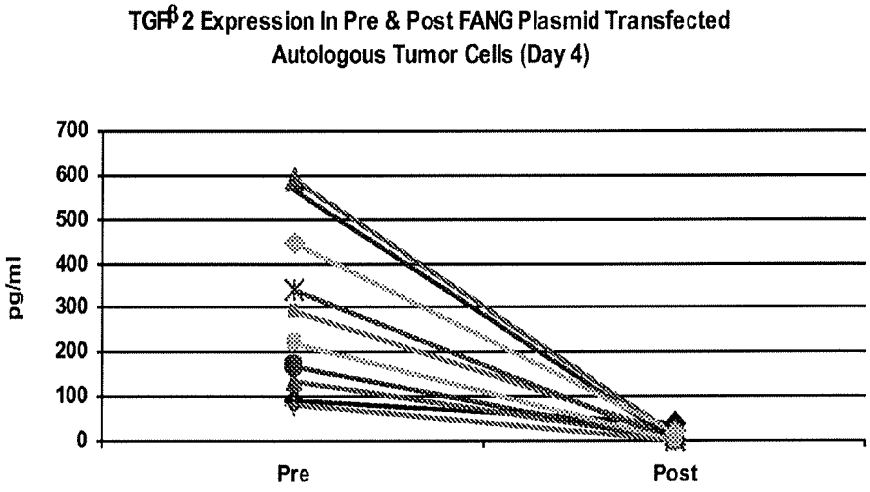

TGFβ2 Expression In Pre & Post FANG Plasmid Transfected Autologous Tumor Cells (Day 4)
700
600
500
400
300
200
100
0
pg/ml
Pre
Post

FIG. 1B

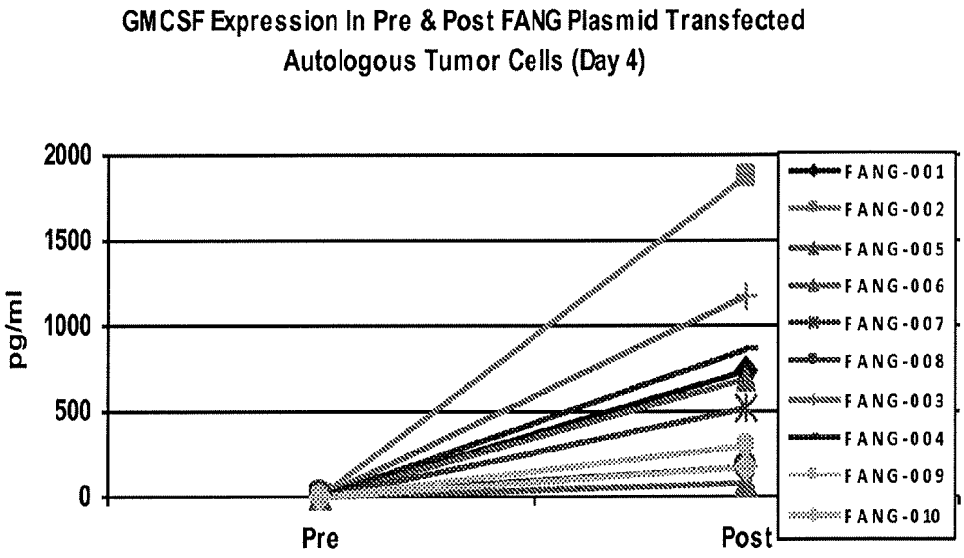

GMCSF Expression In Pre & Post FANG Plasmid Transfected Autologous Tumor Cells (Day 4)
2000
1500
1000
500
0
pg/ml
Pre
Post
FANG-001
FANG-002
FANG-005
FANG-006
FANG-007
FANG-008
FANG-003
FANG-004
FANG-009
FANG-010

FIG. 1C

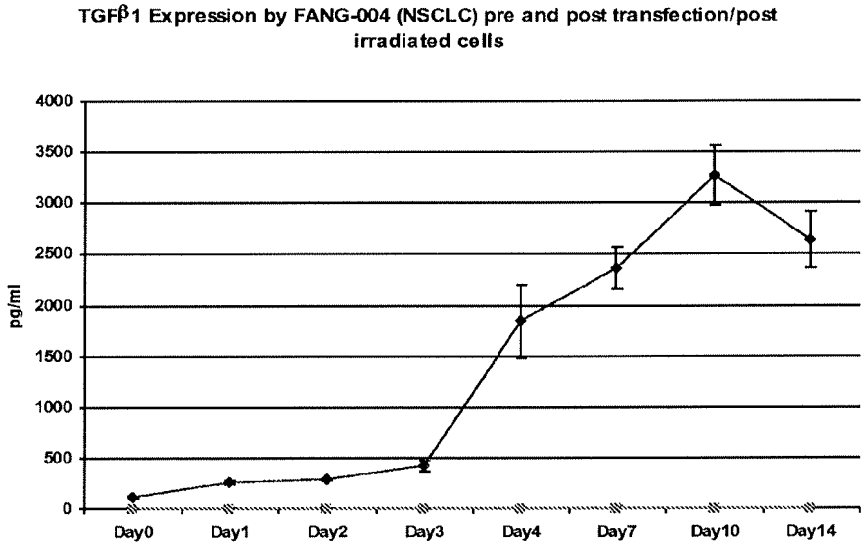

TGFβ1 Expression by FANG-004 (NSCLC) pre and post transfection/post irradiated cells
4000
3500
3000
2500
2000
1500
1000
500
0
pg/ml
Day0
Day1
Day2
Day3
Day4
Day7
Day10
Day14

FIG. 2A

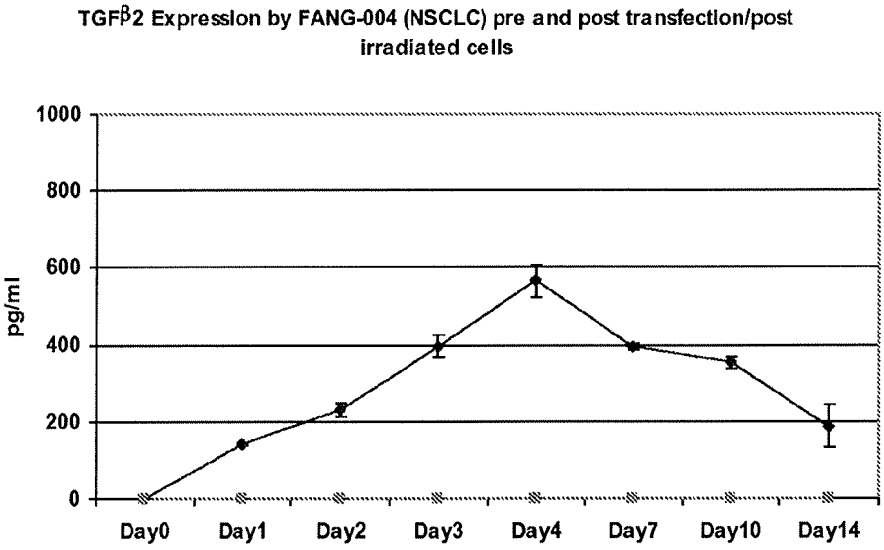

TGFβ2 Expression by FANG-004 (NSCLC) pre and post transfection/post irradiated cells
1000
800
600
400
200
0
pg/ml
Day0
Day1
Day2
Day3
Day4
Day7
Day10
Day14

FIG. 2B

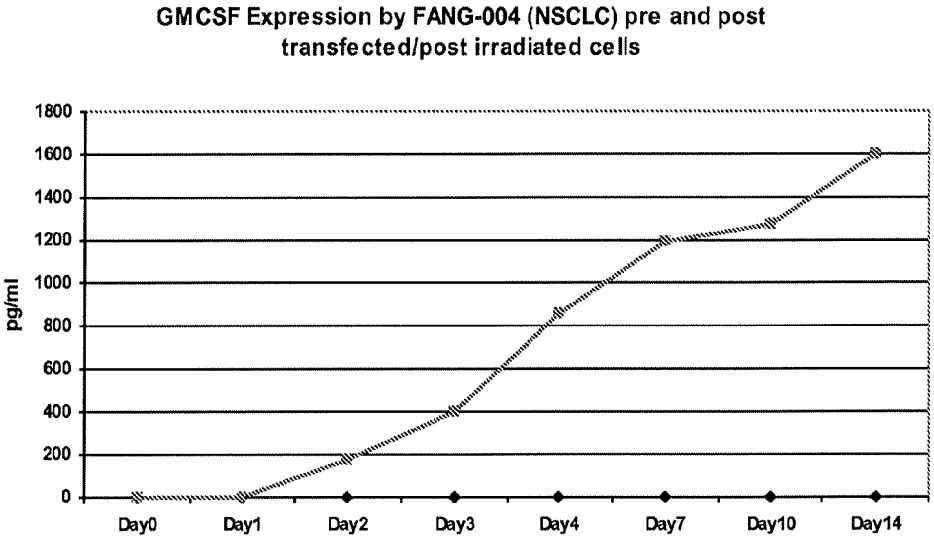

GMCSF Expression by FANG-004 (NSCLC) pre and post transfected/post irradiated cells
1800
1600
1400
1200
1000
800
600
400
200
0
pg/ml
Day0
Day1
Day2
Day3
Day4
Day7
Day10
Day14

FIG. 2C

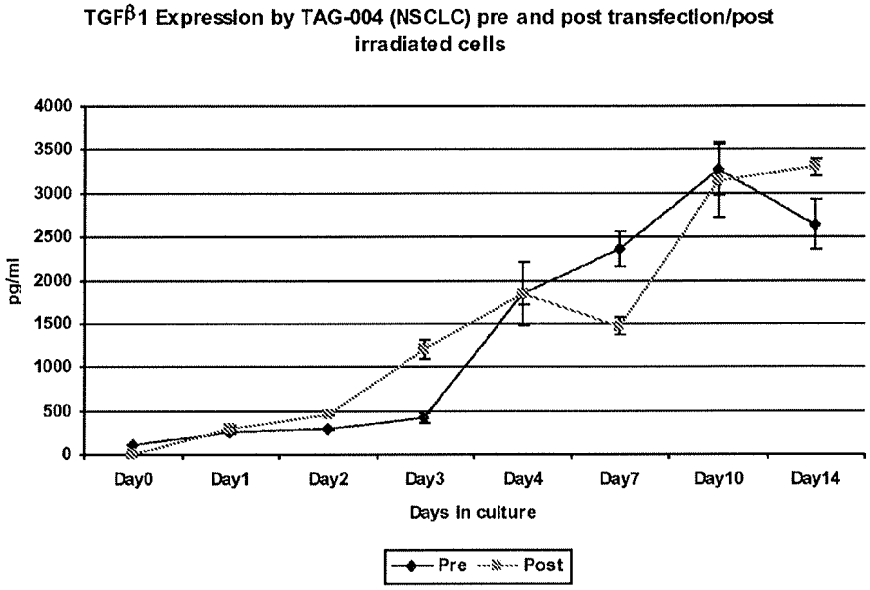

TGFβ1 Expression by TAG-004 (NSCLC) pre and post transfection/post irradiated cells
4000
3500
3000
2500
2000
1500
1000
500
0
pg/ml
Day0
Day1
Day2
Day3
Day4
Day7
Day10
Day14
Days in culture
Pre
Post

FIG. 2D

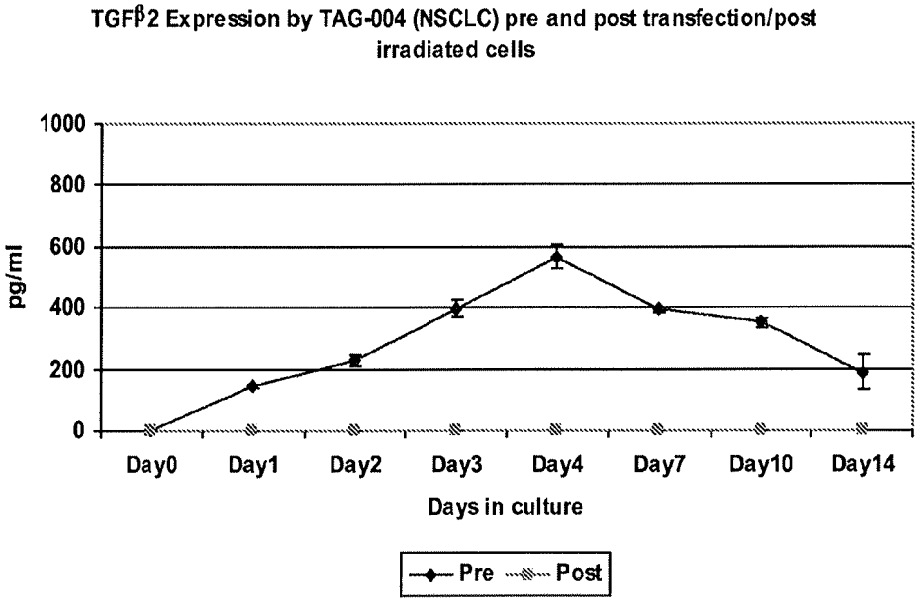

TGFβ2 Expression by TAG-004 (NSCLC) pre and post transfection/post irradiated cells
1000
800
600
400
200
0
pg/ml
Day0
Day1
Day2
Day3
Day4
Day7
Day10
Day14
Days in culture
Pre
Post

FIG. 2E

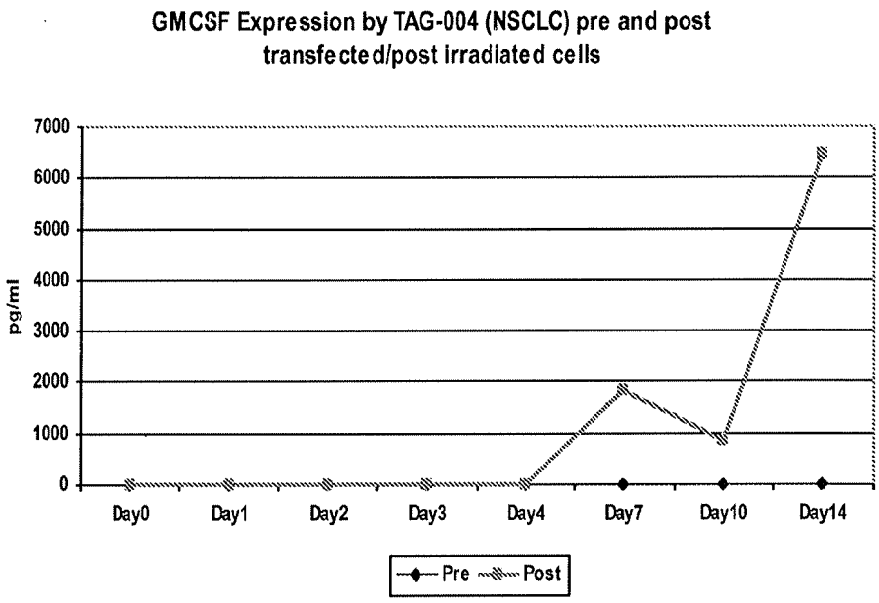

GMCSF Expression by TAG-004 (NSCLC) pre and post transfected/post irradiated cells
7000
6000
5000
4000
3000
2000
1000
0
pg/ml
Day0
Day1
Day2
Day3
Day4
Day7
Day10
Day14
Pre
Post

FIG. 2F

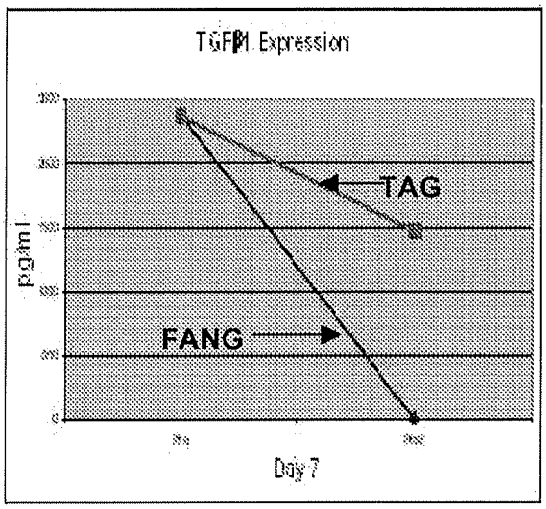


FIG. 3A

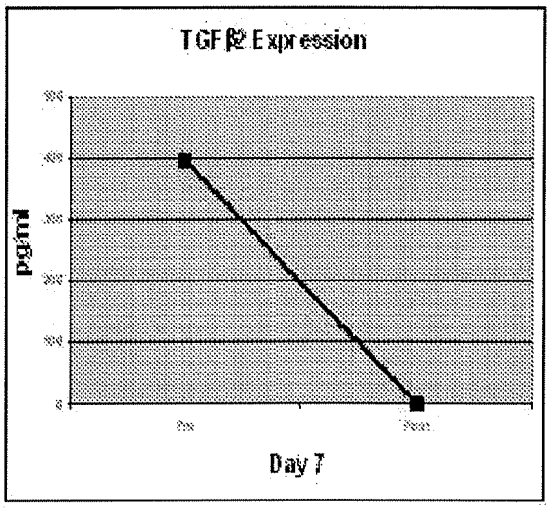


FIG. 3B

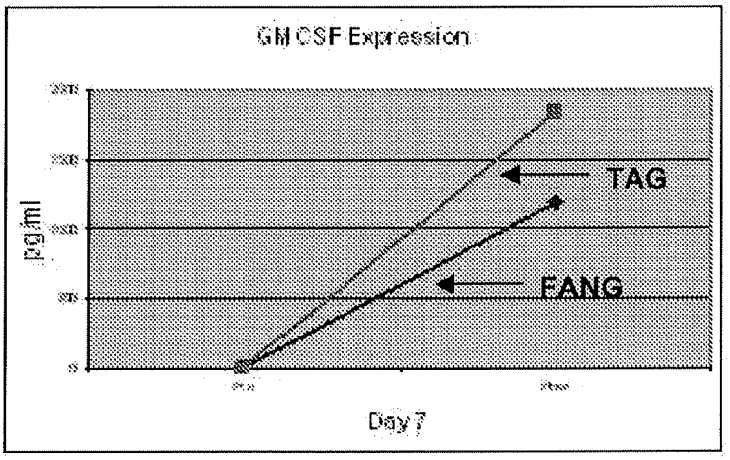


FIG. 3C

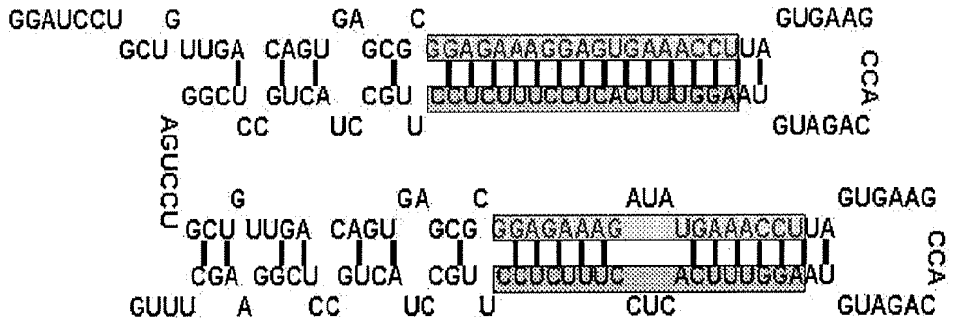

GGAUCCU G GA C GUGAAG
GCU UUGA CAGU GCG GGAGAAAGGAGUGAAACCUUA CCA
GGCU GUCA CGU CCUCUUUCCUCACUUUGGAAU
AGUCCU CC UC U GUAGAC
G GA C AUA GUGAAG
GCU UUGA CAGU GCG GGAGAAAG UGAAACCUUA CCA
CGA GGCU GUCA CGU CCUCUUUC ACUUUGGAAU
GUUU A CC UC U CUC GUAGAC
= sense (passenger) strand
= antisense (guide) strand

FIG. 4A

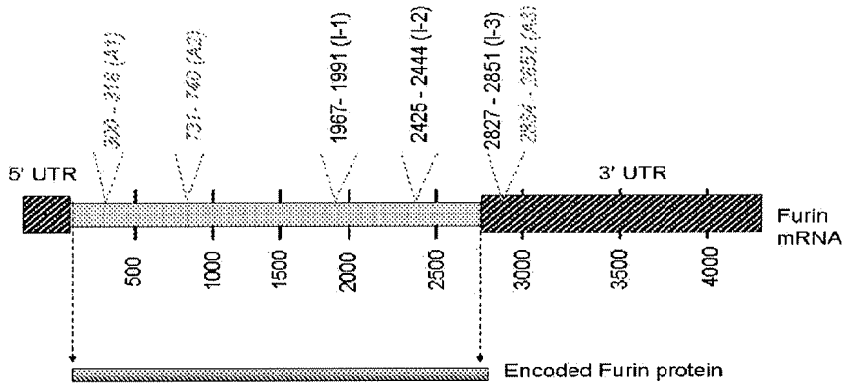

1967- 1991 (I-1)
2425 - 2444 (I-2)
2827 - 2851 (I-3)
5' UTR
3' UTR
Furin mRNA
500
1000
1500
2000
2500
3000
3500
4000
Encoded Furin protein

FIG. 4B

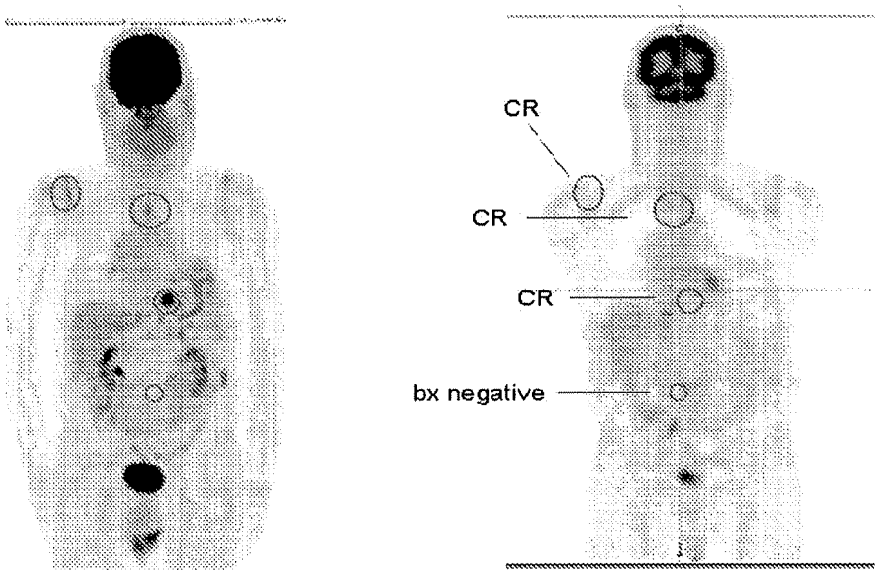

CR
CR
CR
bx negative
07/07/08
pre TAG baseline
10/05/09
post TAG

FIG. 5

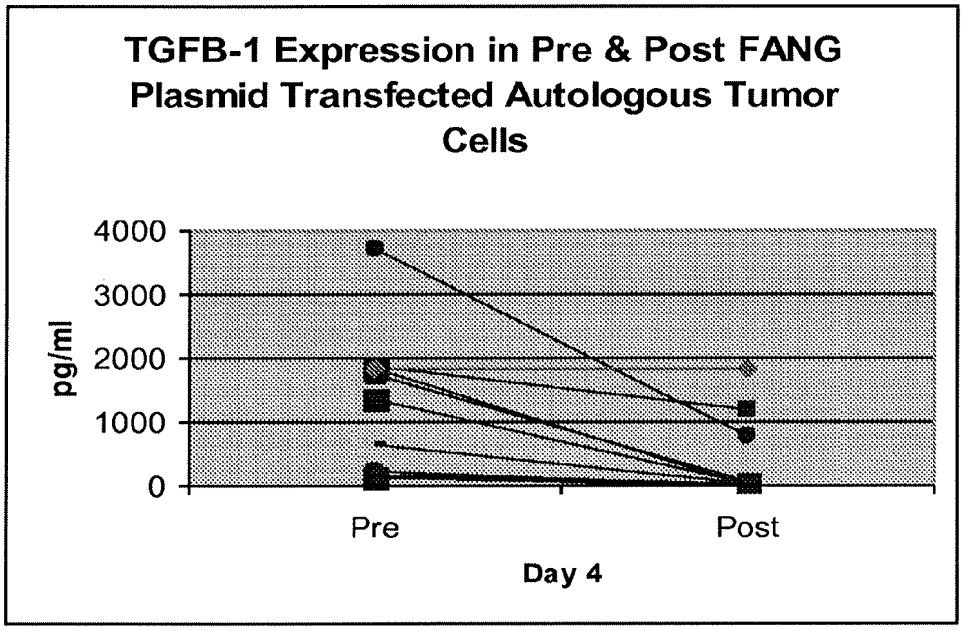

TGFB-1 Expression in Pre & Post FANG Plasmid Transfected Autologous Tumor Cells
4000
3000
2000
1000
0
pg/ml
Pre
Post
Day 4

FIG. 6A

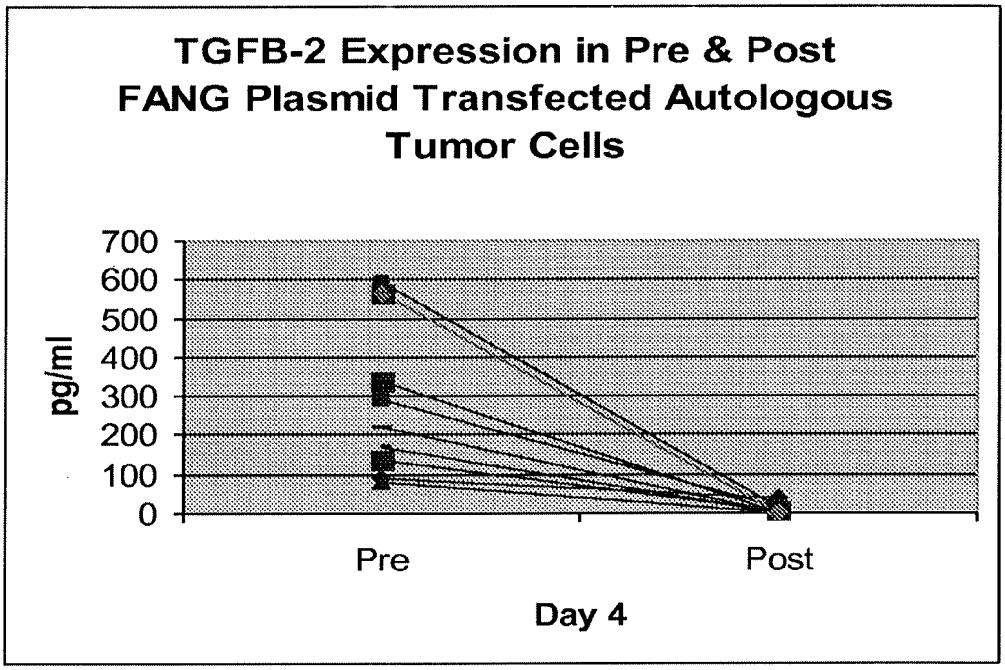

TGFB-2 Expression in Pre & Post FANG Plasmid Transfected Autologous Tumor Cells
700
600
500
400
300
200
100
0
pg/ml
Pre
Post
Day 4

FIG. 6B

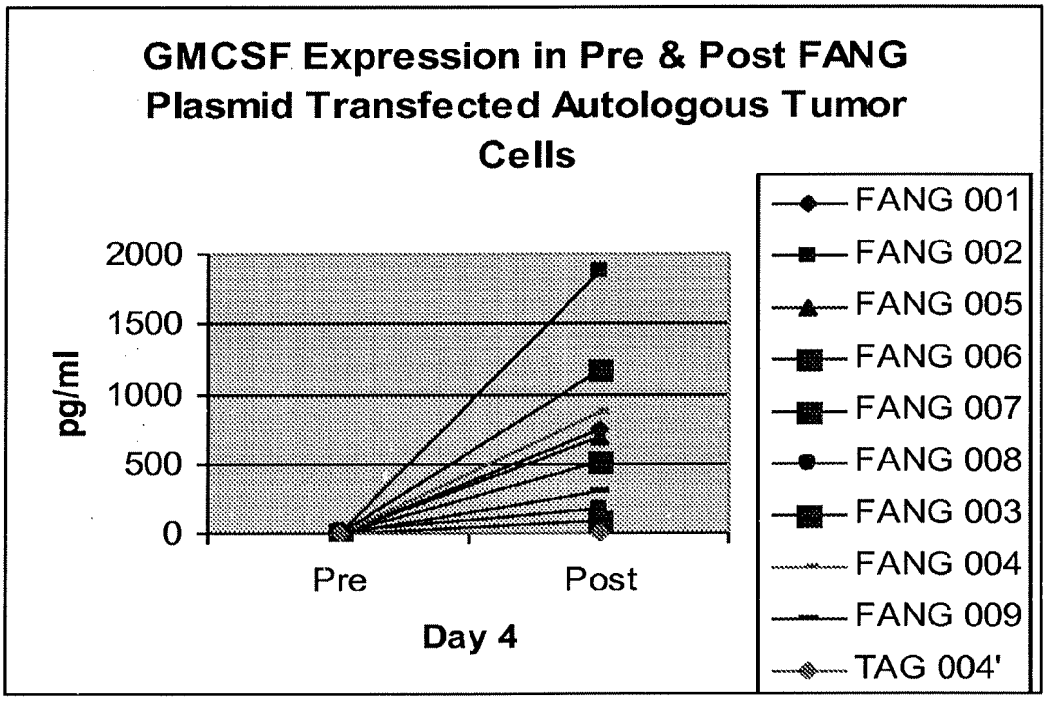

GMCSF Expression in Pre & Post FANG Plasmid Transfected Autologous Tumor Cells
2000
1500
1000
500
0
pg/ml
Pre
Post
Day 4
FANG 001
FANG 002
FANG 005
FANG 006
FANG 007
FANG 008
FANG 003
FANG 004
FANG 009
TAG 004'

FIG. 6C

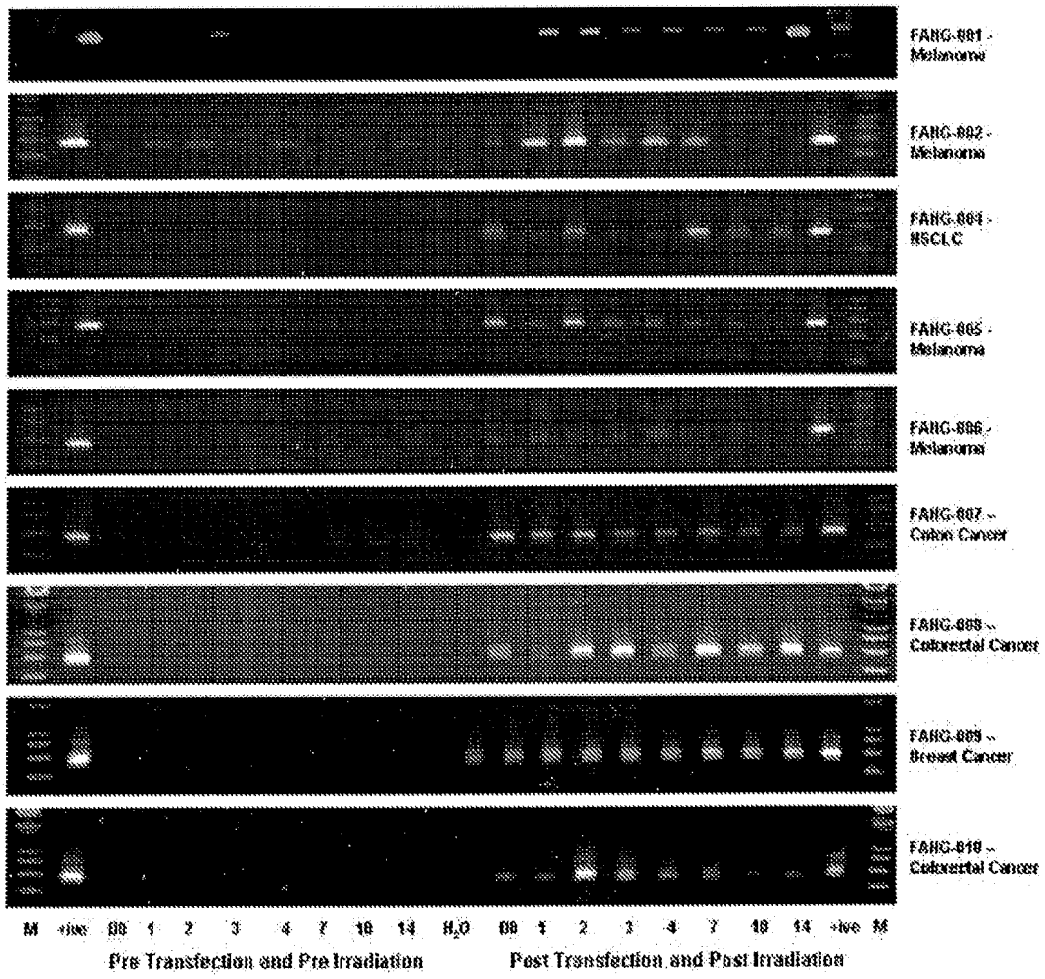

FANG-001 - Melanoma
FANG-002 - Melanoma
FANG-004 - NSCLC
FANG-005 - Melanoma
FANG-006 - Melanoma
FANG-007 - Colon Cancer
FANG-008 - Colorectal Cancer
FANG-009 - Breast Cancer
FANG-010 - Colorectal Cancer
M +ive 00 1 2 3 4 7 10 14 H2O 00 1 2 3 4 7 10 14 +ive M
Pre Transfection and Pre Irradiation
Post Transfection and Post Irradiation

FIG. 7

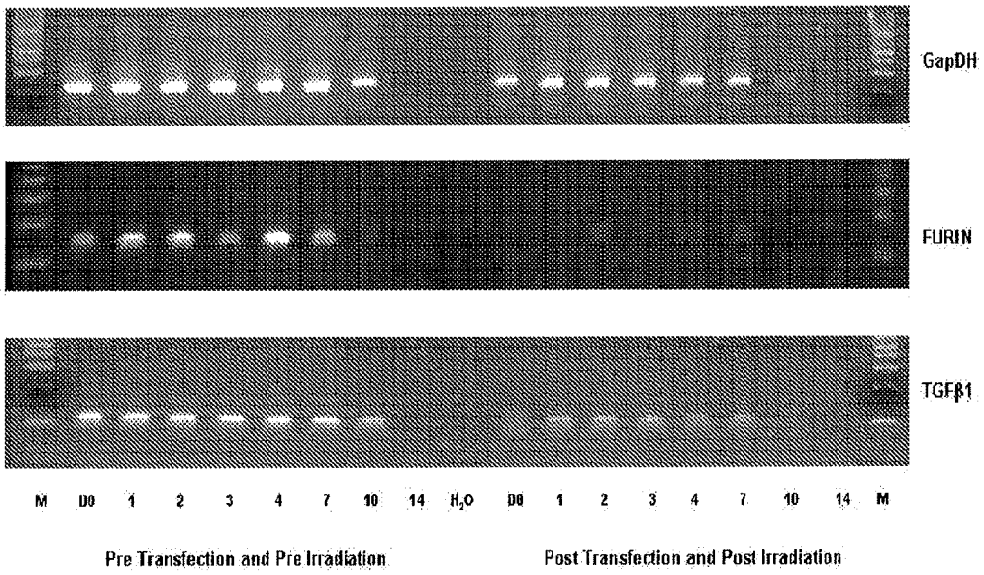

GapDH
FURIN
TGFβ1
M D0 1 2 3 4 7 10 14 H2O D0 1 2 3 4 7 10 14 M
Pre Transfection and Pre Irradiation
Post Transfection and Post Irradiation

FIG. 8

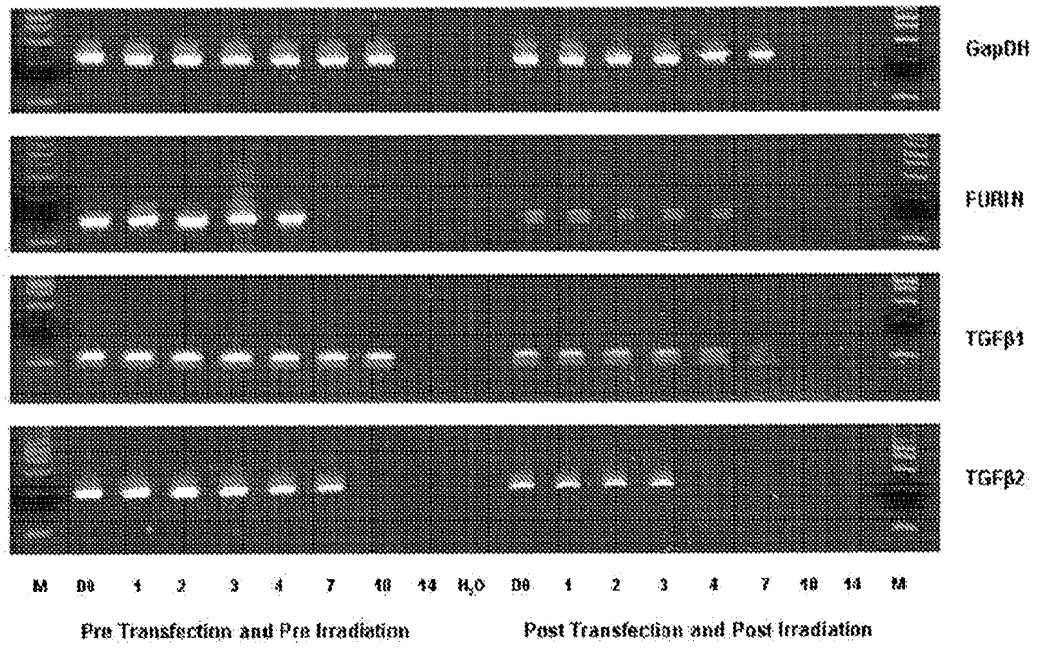

GapDH
FURIN
TGFβ1
TGFβ2
M D0 1 2 3 4 7 10 14 H2O D0 1 2 3 4 7 10 14 M
Pre Transfection and Pre Irradiation
Post Transfection and Post Irradiation

FIG. 9

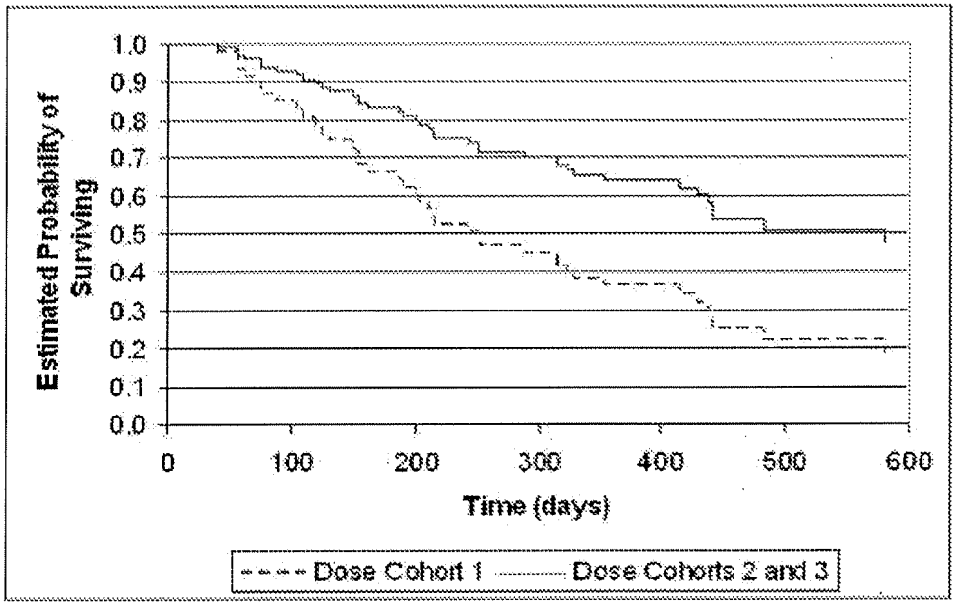

Estimated Probability of Surviving
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400
500
600
Time (days)
Dose Cohort 1
Dose Cohorts 2 and 3

FIG. 10

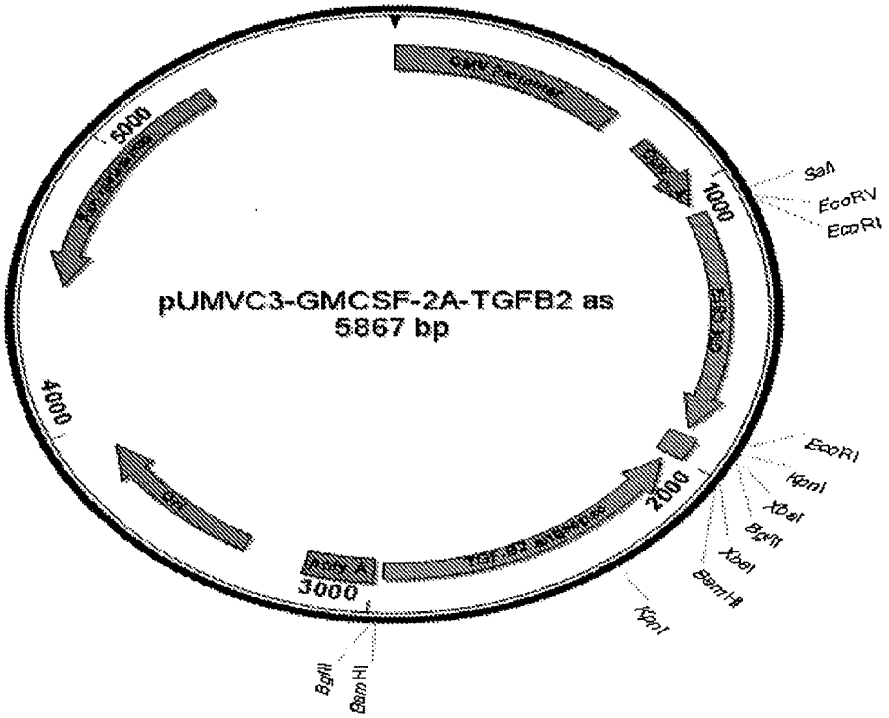

pUMVC3-GMCSF-2A-TGFB2 as
5867 bp
1000
2000
3000
4000
5000
SalI
EcoRV
EcoRI
EcoRI
KpnI
XbaI
BglII
XbaI
BamHI
KpnI
BglII
BamHI

FIG. 11

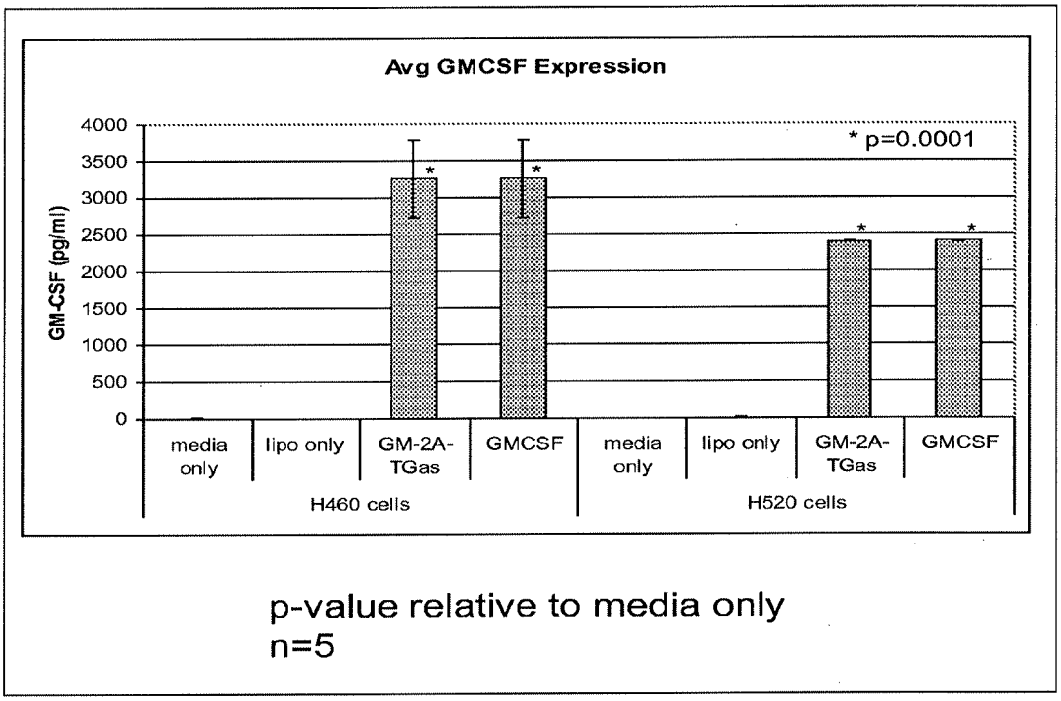

Avg GMCSF Expression
GM-CSF (pg/ml)
4000
3500
3000
2500
2000
1500
1000
500
0
* p=0.0001
media only
lipo only
GM-2A-TGas
GMCSF
media only
lipo only
GM-2A-TGas
GMCSF
H460 cells
H520 cells
p-value relative to media only
n=5

FIG. 12

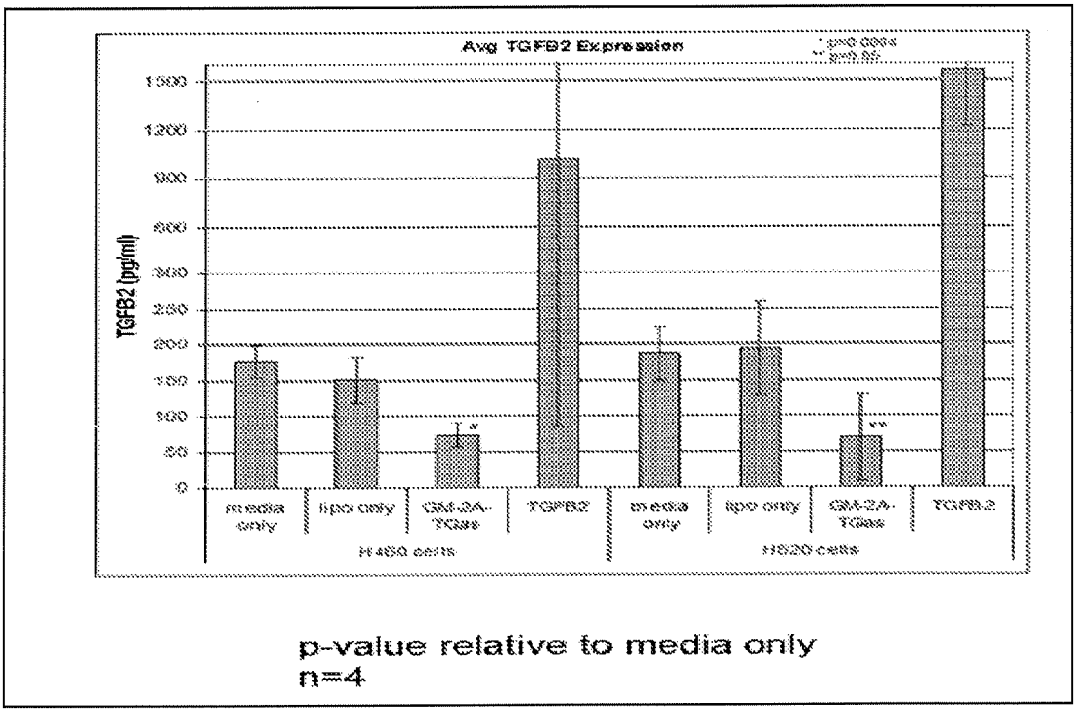
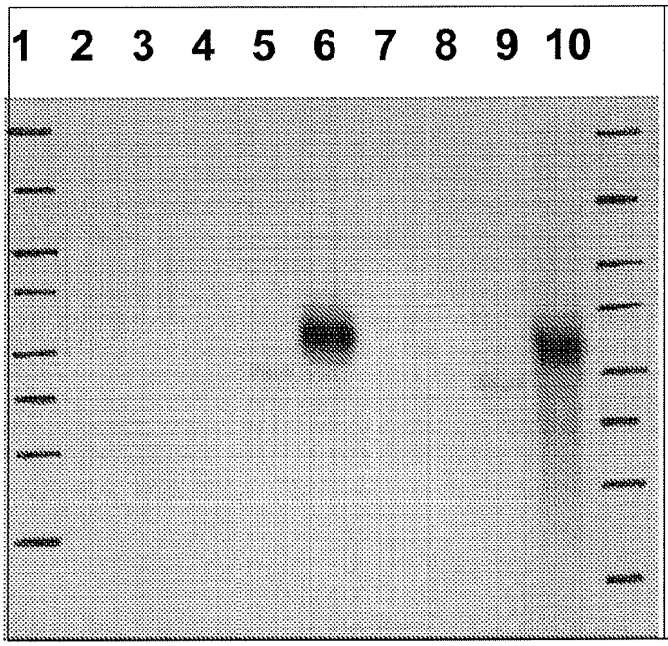

Avg TGFB2 Expression
TGFB2 (pg/ml)
media only
lipo only
GM-2A-TGas
TGFB2
media only
lipo only
GM-2A-TGas
TGFB2
H460 cells
H520 cells
p-value relative to media only
n=4

FIG. 13



Lane #	Sample Identity
1	RNA Marker
2	460-media
3	460-lipo
4	460-GMCSF
5	460-TGFB
6	460-GM/TG2A
7	520-lipo
8	520-GMCSF
9	520-TGFB2
10	520-GM/TG2A

FIG. 14

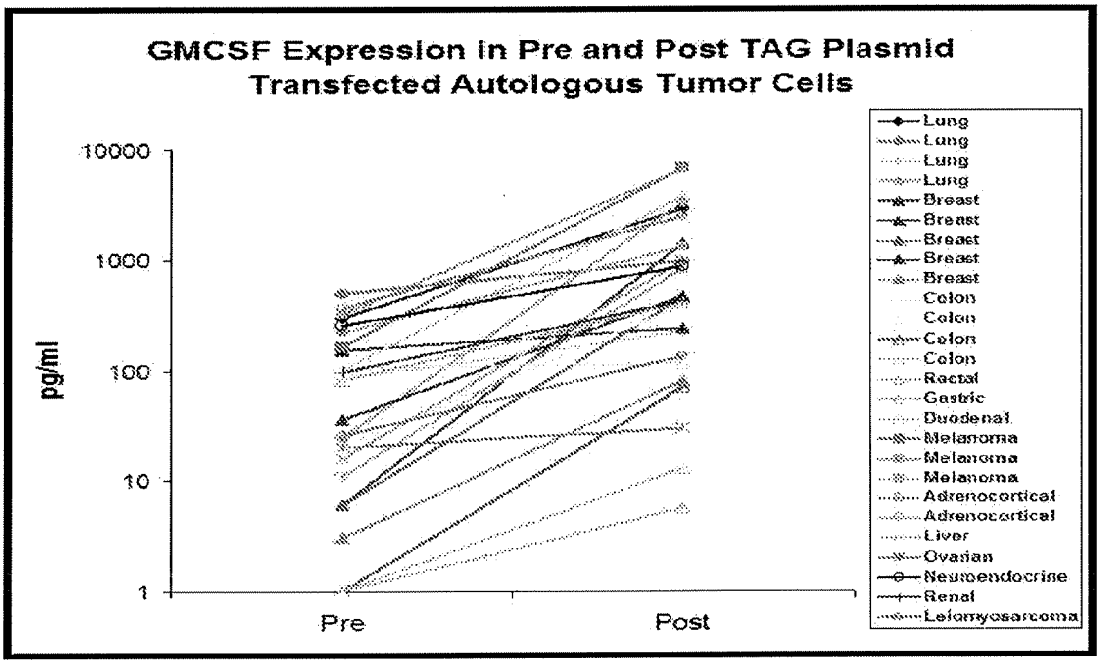
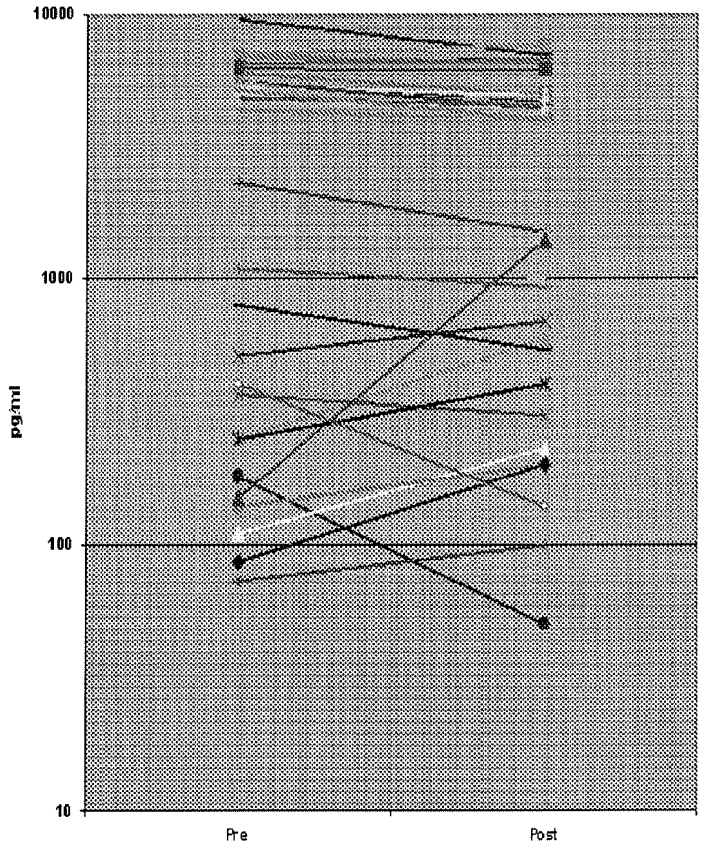


FIG. 15



	TGFβ1 Expression (Day 7)	Pre	Post
1	Lung	9500	4800
2	Lung	6000	4500
3	Lung	5300	4500
4	Lung	4400	4500
5	Lung	9500	6400
6	Lung	180	50
7	Lung	2300	1900
8	Lung	9500	7000
9	Breast	4300	4000
10	Breast	6500	6500
11	Breast	5000	4300
12	Breast	110	220
13	Melanoma	1300	1000
14	Melanoma	6800	3700
15	Melanoma	7100	7600
16	Melanoma	4800	4100
17	Colon	4800	4500
18	Colon	5100	4000
19	Colon	73	100
20	Colon	1500	1400
21	Rectal	250	800
22	Ovarian	6500	6500
23	Bladder	367	308
24	Bladder	140	200
25	Neuroendocrine	6500	6800
26	Adrenocortical	6900	6700
27	Adrenocortical	800	640
28	Gastric	95	200
29	Hepatobiliary	6200	6100
30	Renal	150	1400
31	Urachal	510	650
32	Prostate	249	404
33	Leiomyosarcoma	400	140
34	Hemangio pericytoma	1100	925
All tumor	Ave	3380	3064
	Std Dev	2843	2565
	Median	4350	3940

FIG. 16

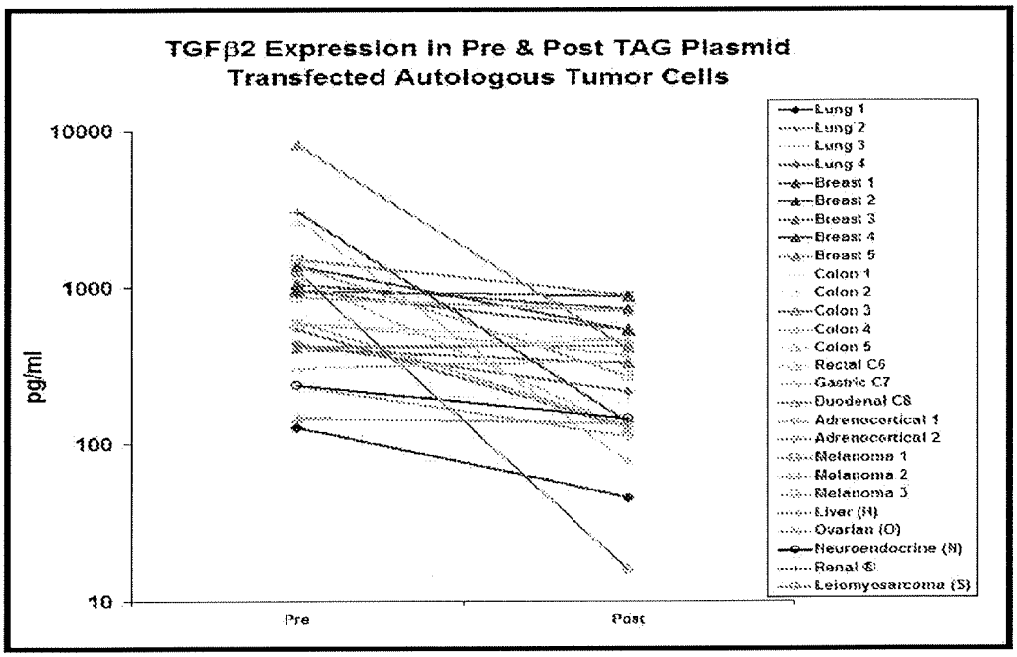


FIG. 17

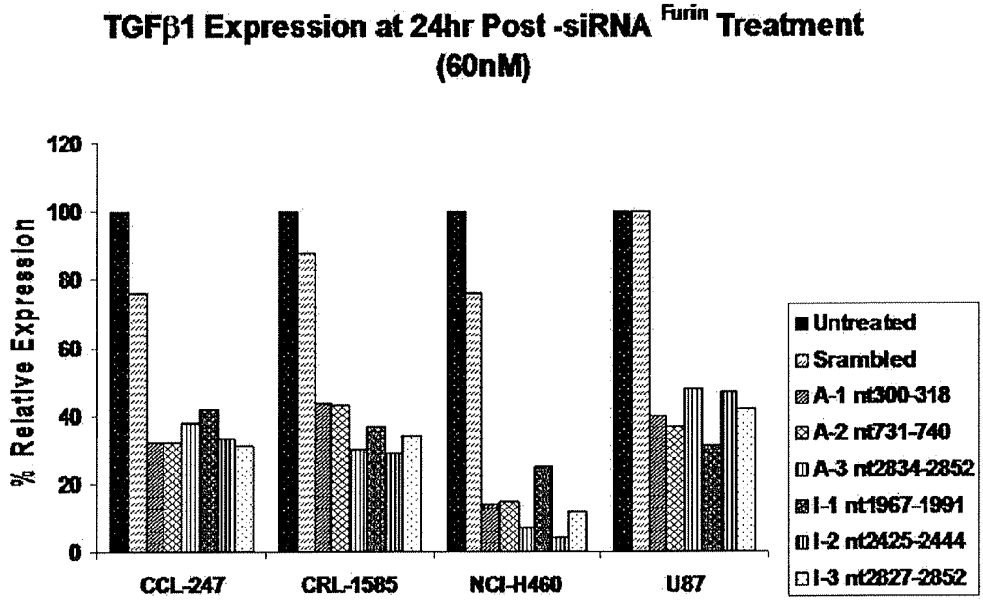


FIG. 18A

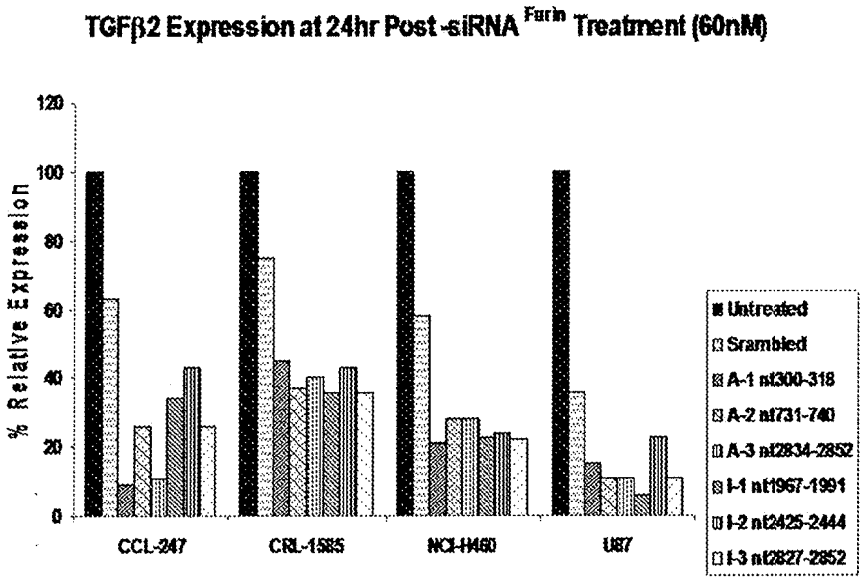


FIG. 18B

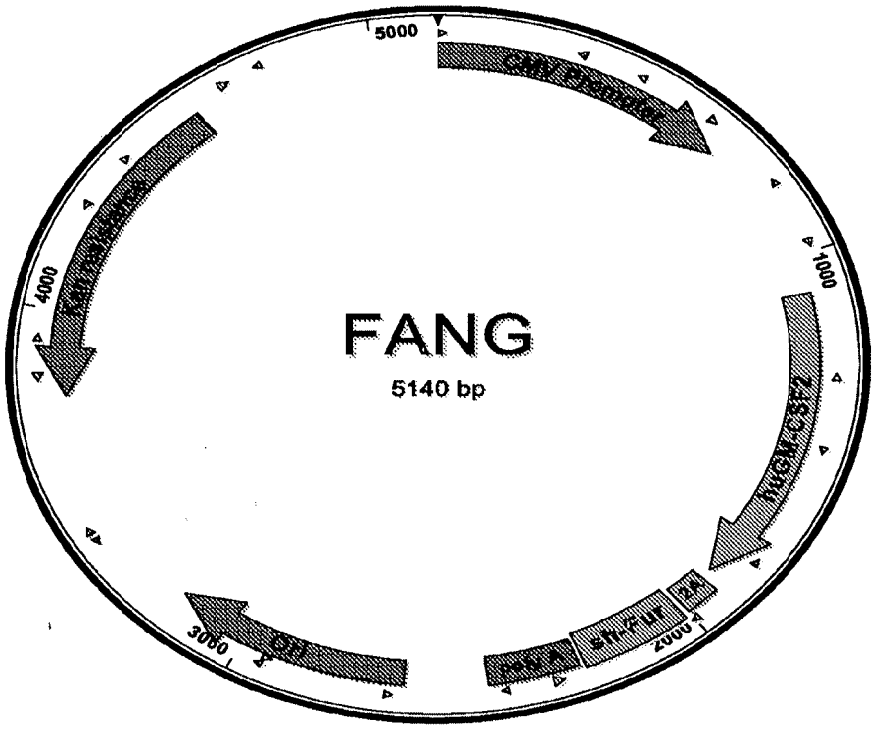


FIG. 19