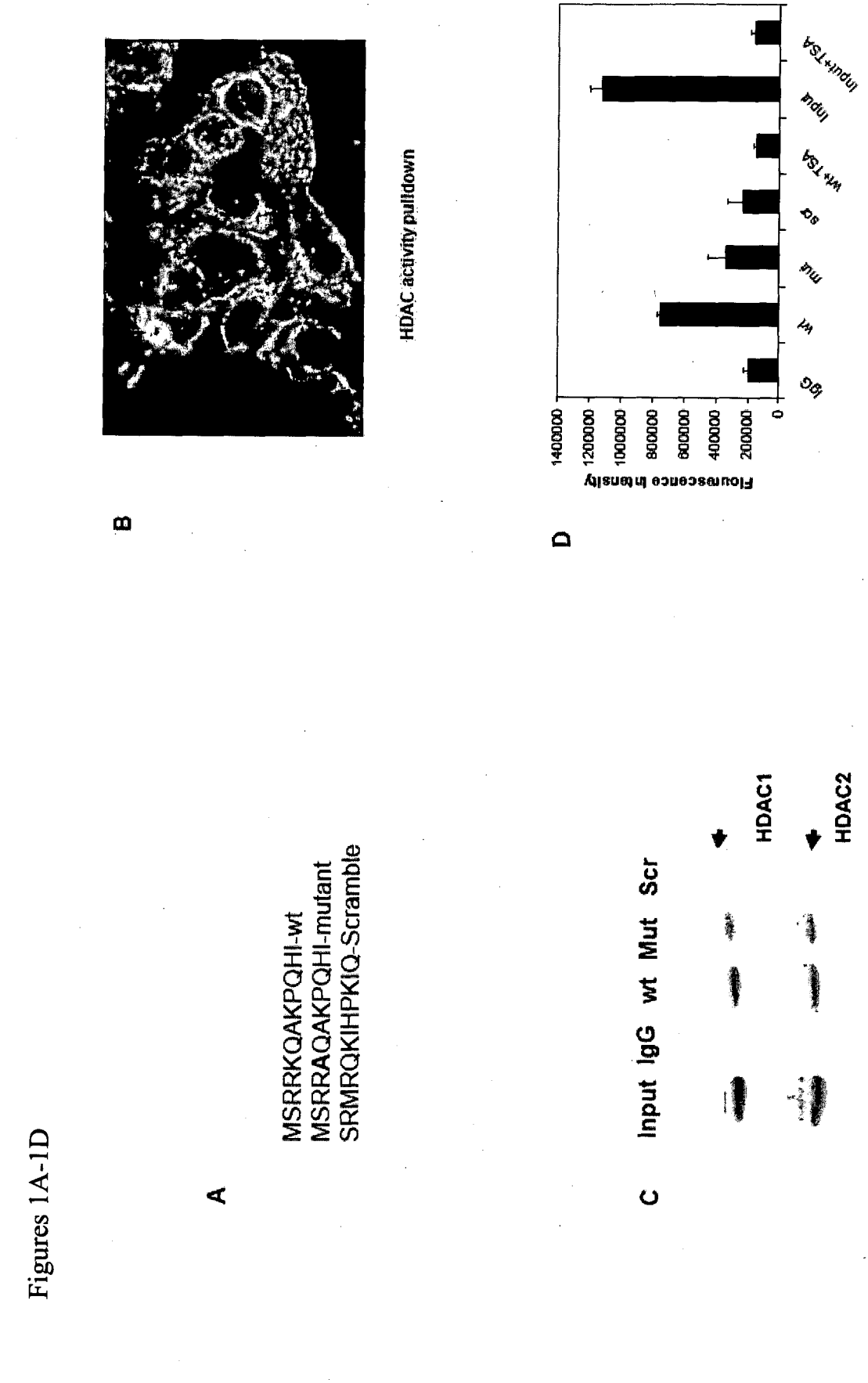
Figures 1A-1D



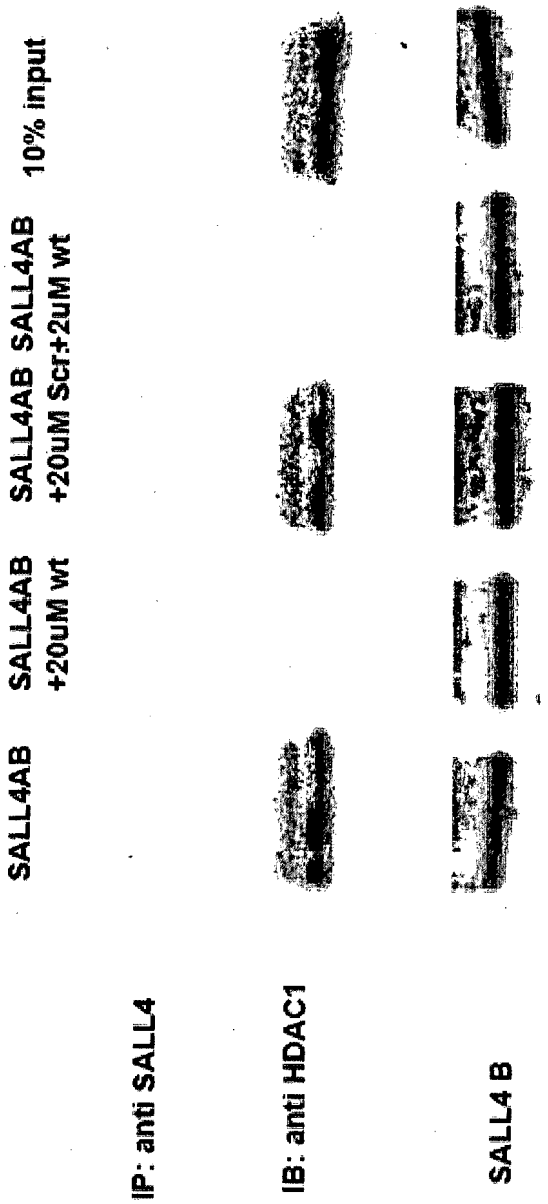
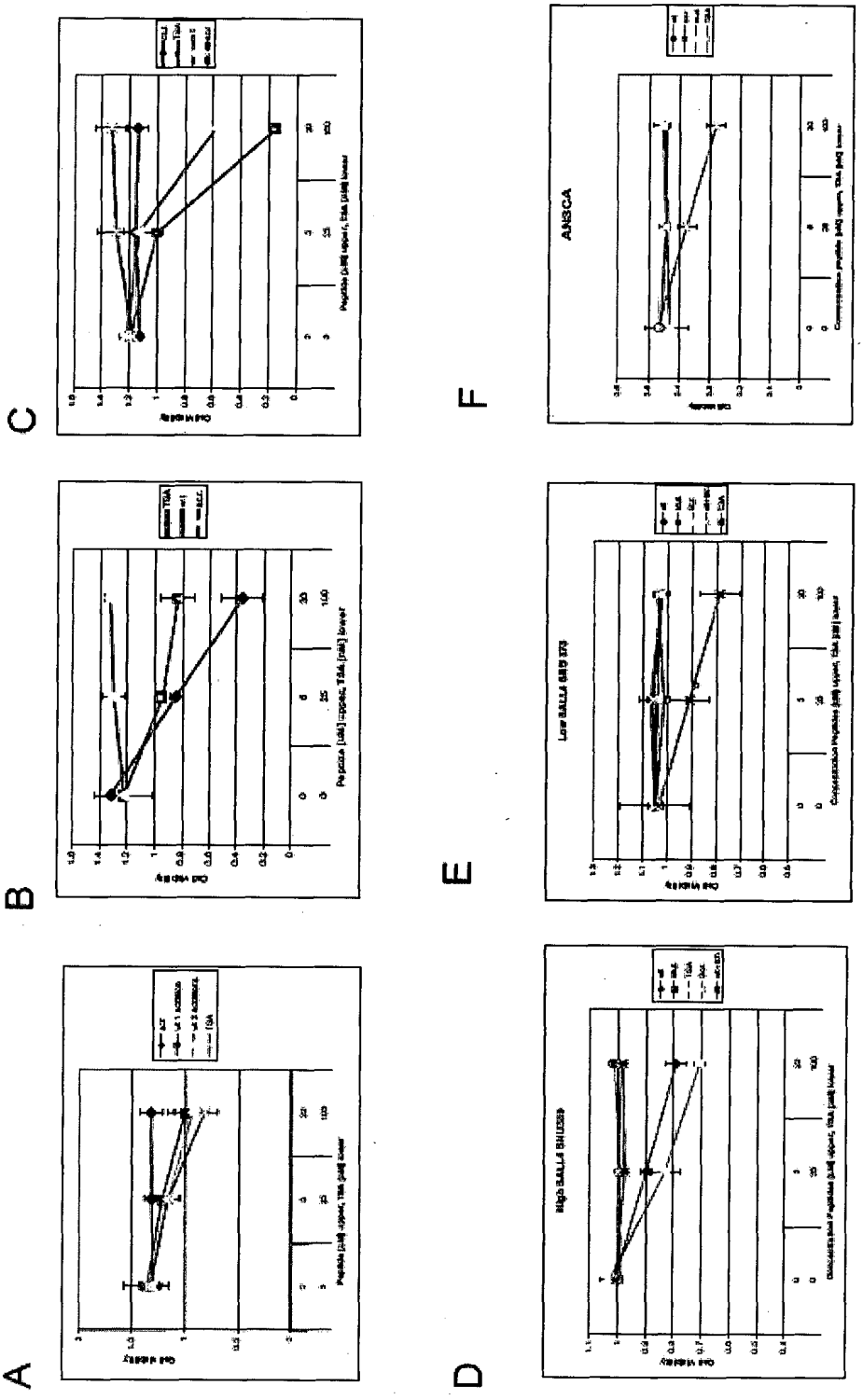
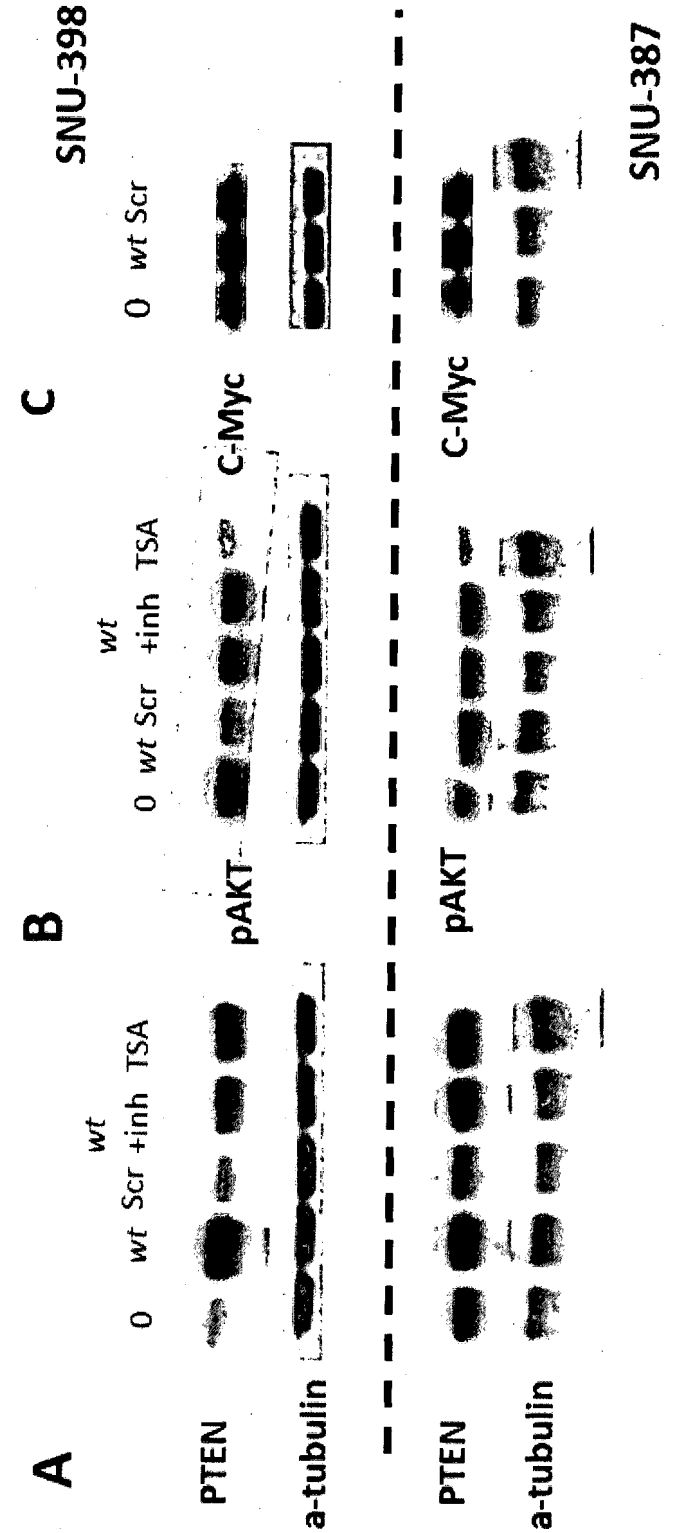

SALL4AB
SALL4AB +20uM wt
SALL4AB +20uM Scr+2uM wt
SALL4AB +2uM wt
10% input
IP: anti SALL4
IB: anti HDAC1
SALL4 B

Figure 2



Figures 3A-3F



Figures 4A-4C

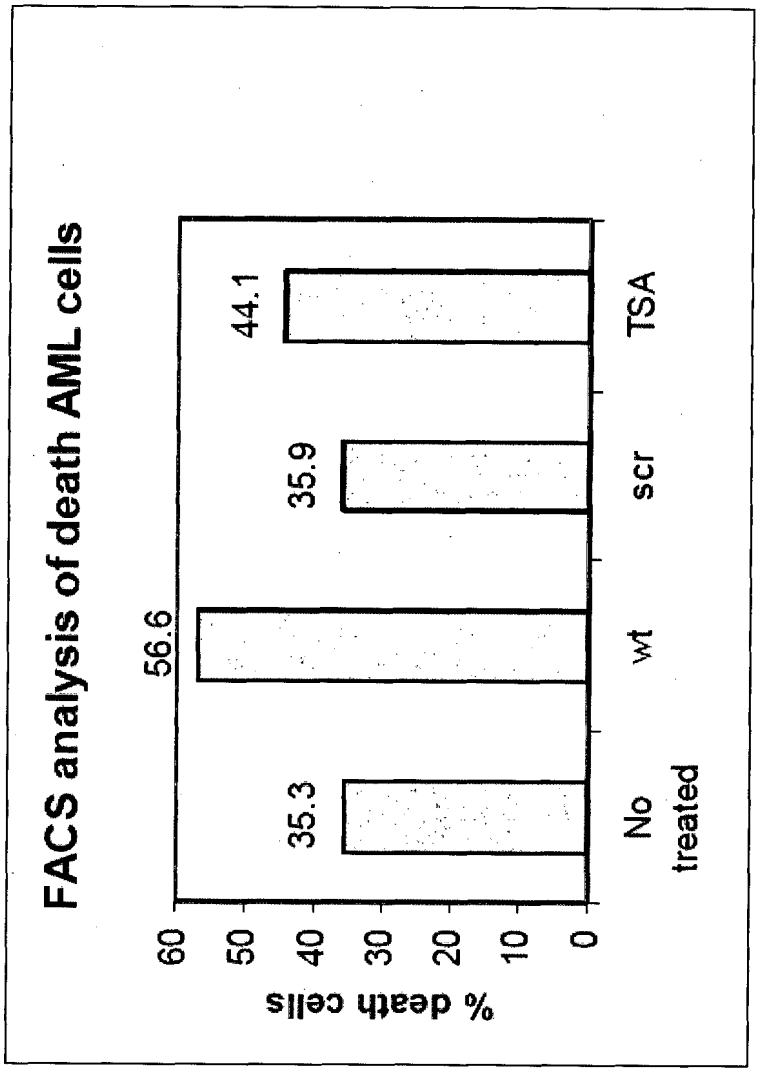
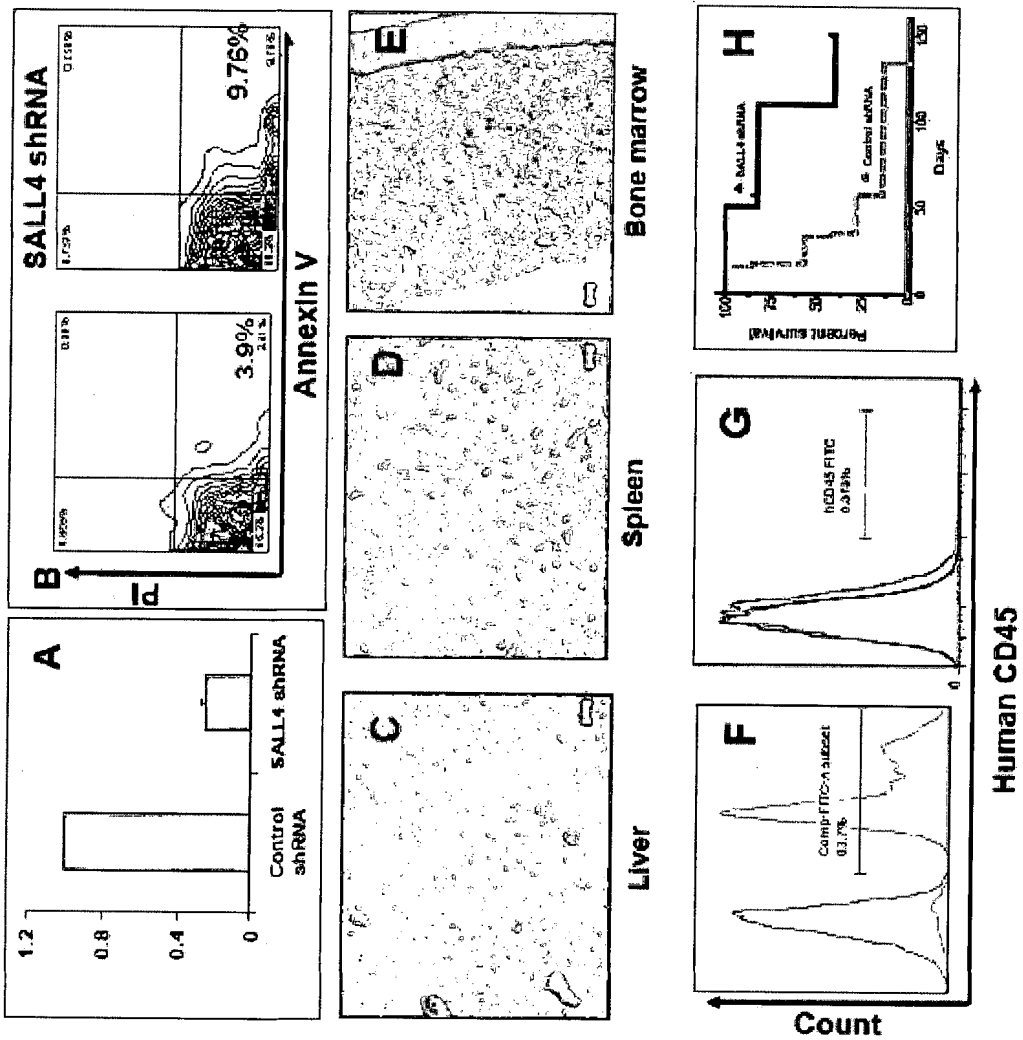
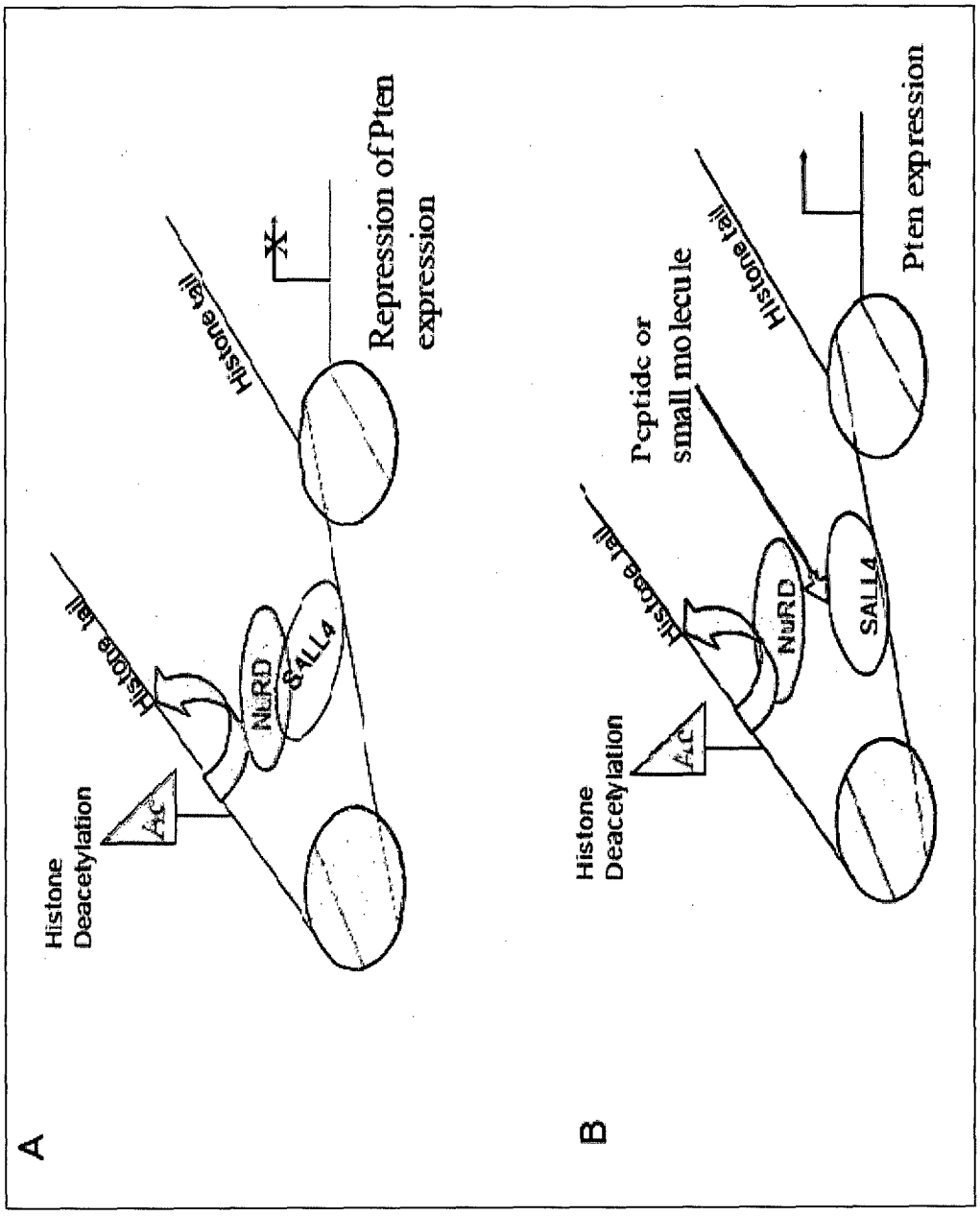

FACS analysis of death AML cells
% death cells
0
10
20
30
40
50
60
35.3
56.6
35.9
44.1
No treated
wt
scr
TSA

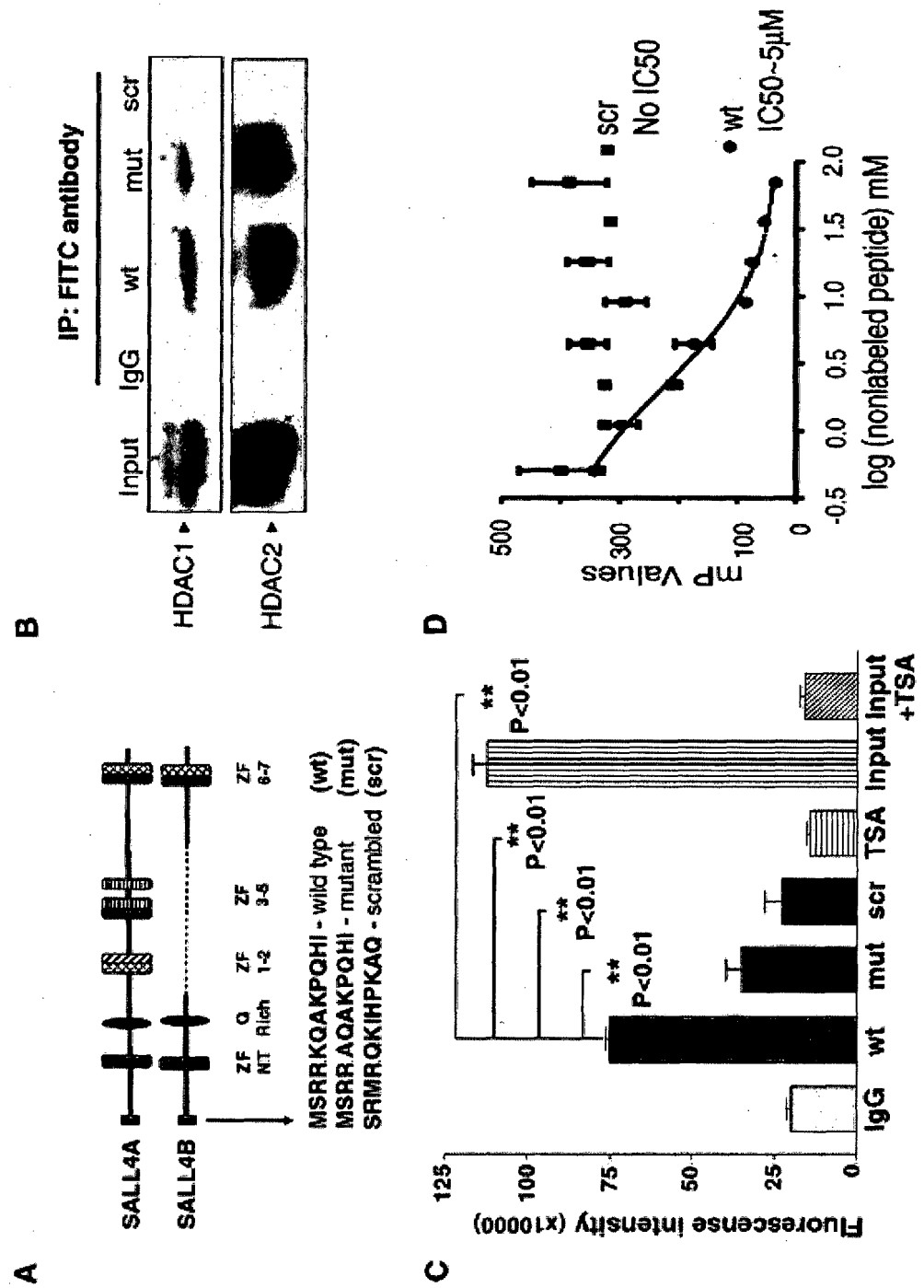
Figure 5



Figures 6A-6H

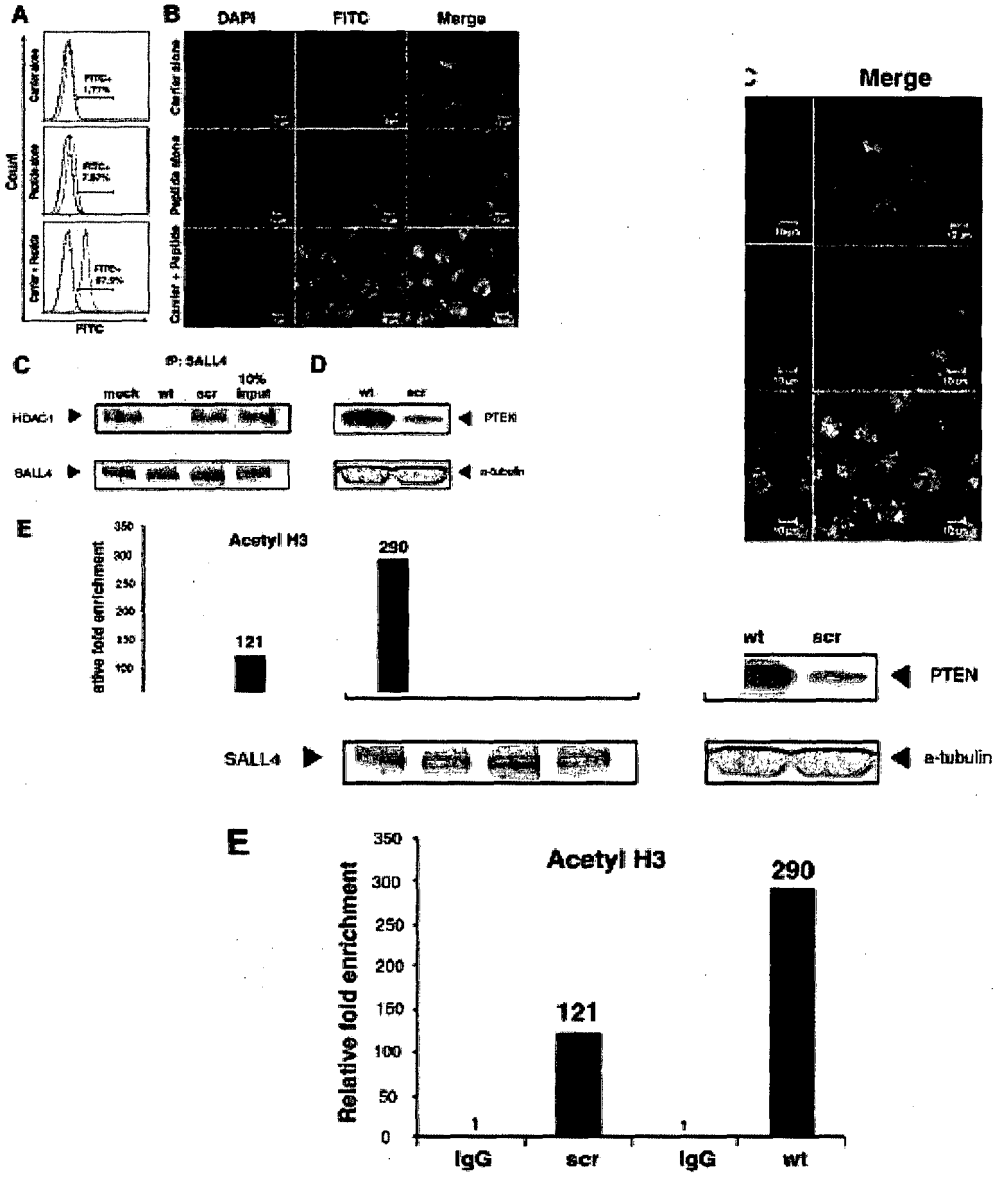


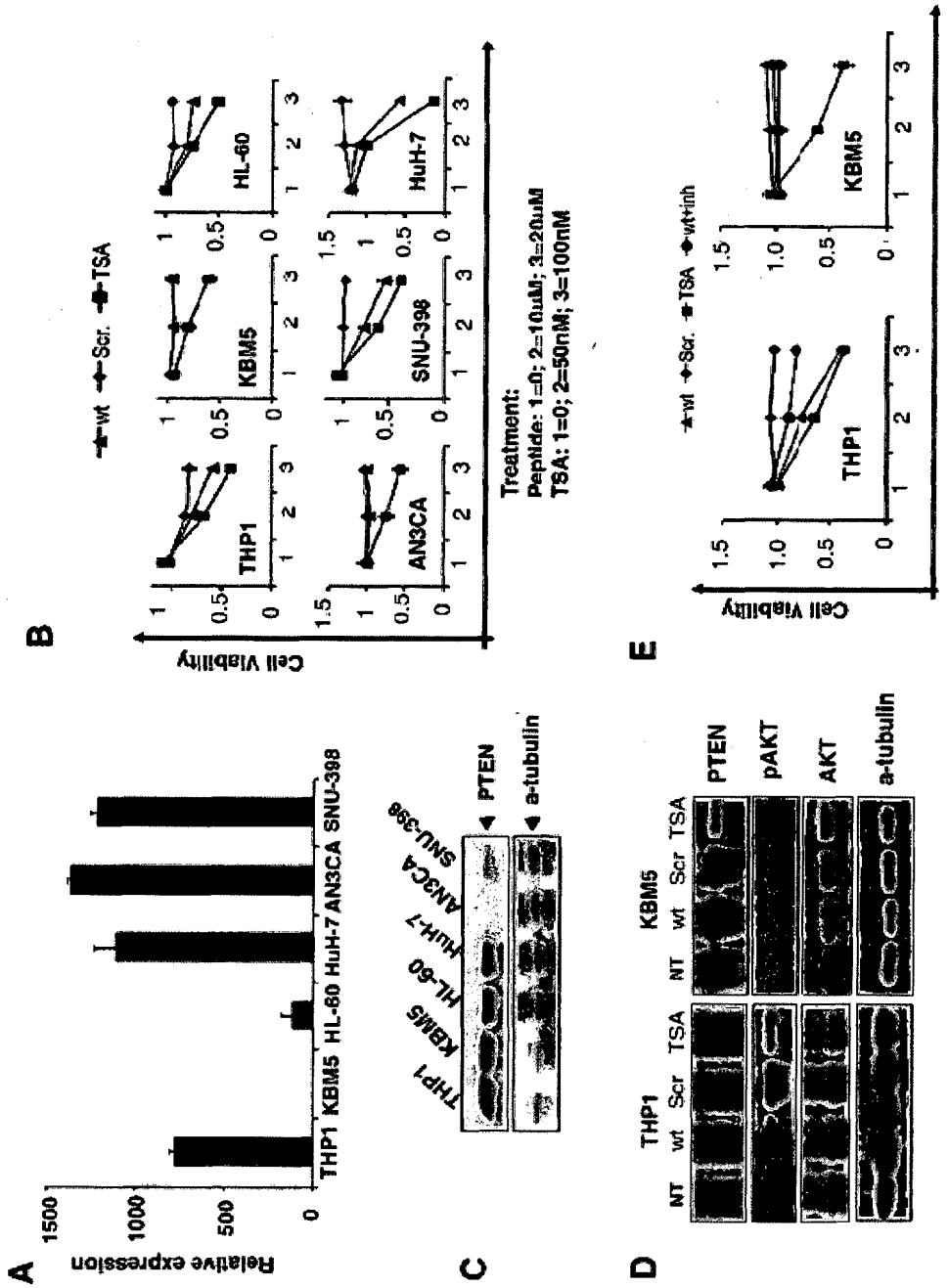
Figures 7A-7B



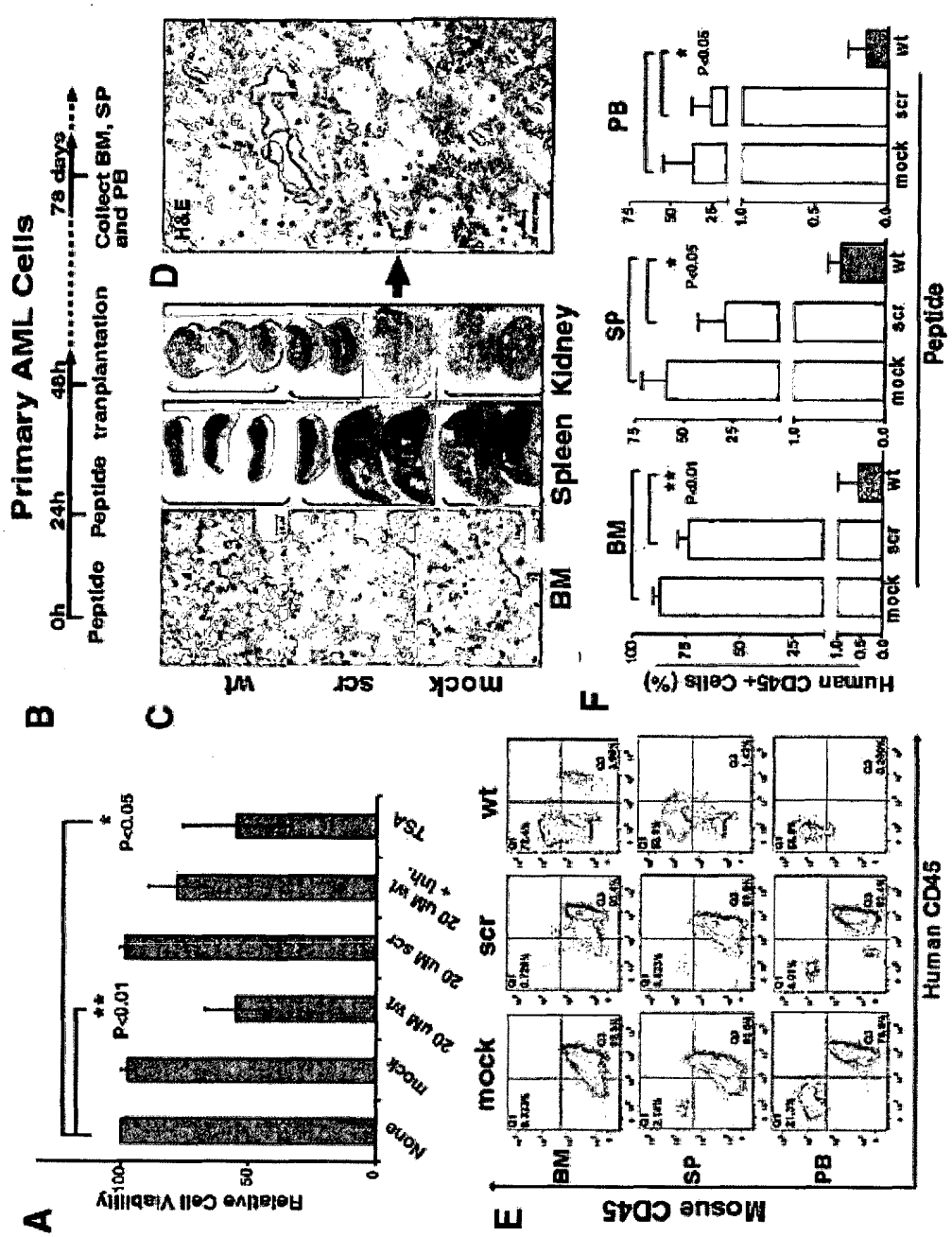
Figures 8A-8D

Figures 9A-9E





Figures 10A-10E



Figures 11A-11F

Figures 12A-12F

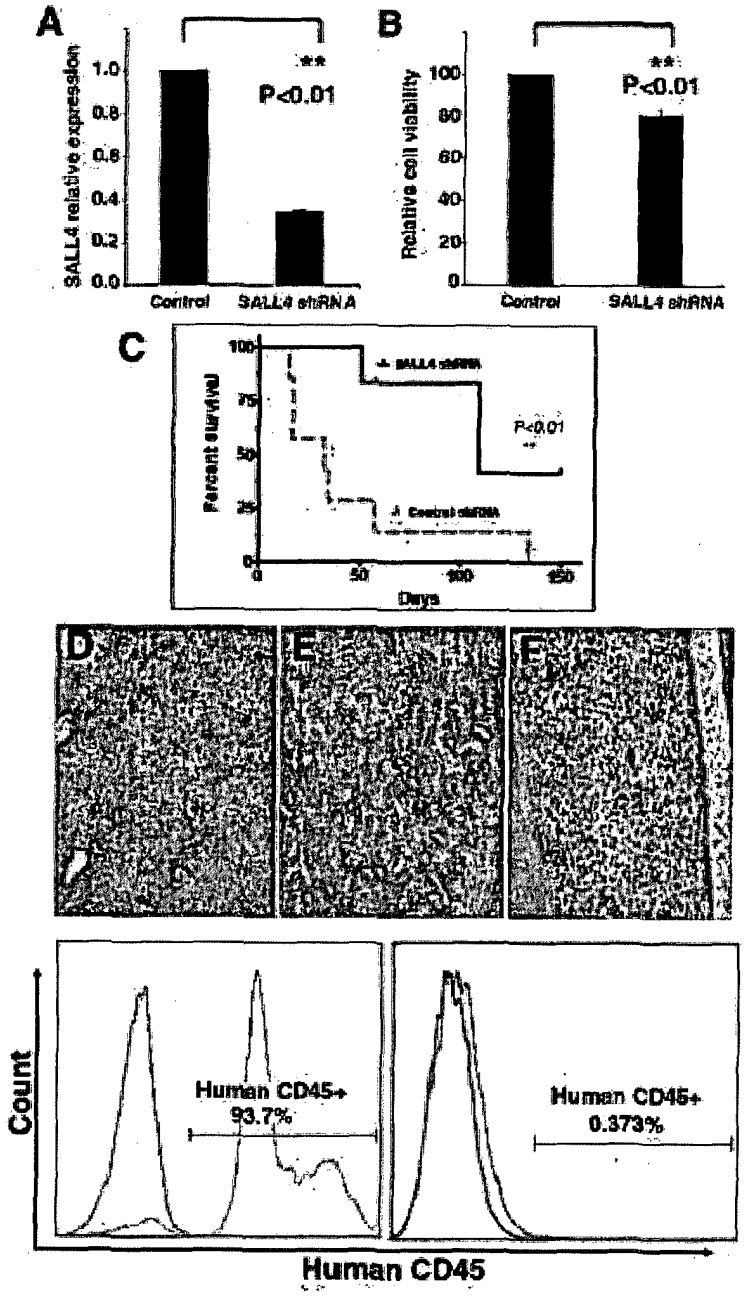
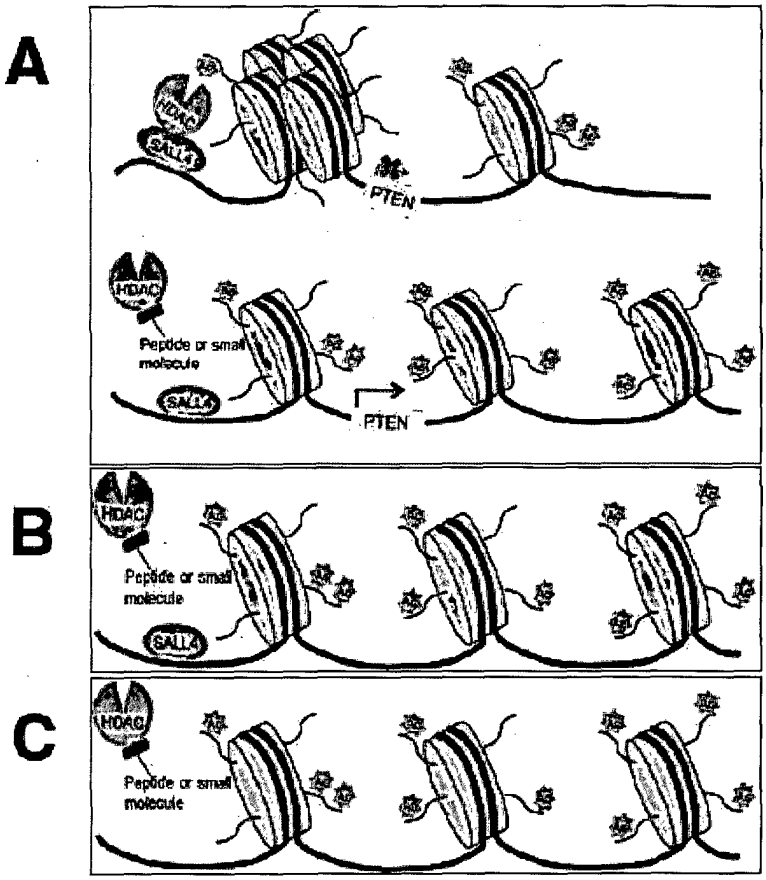
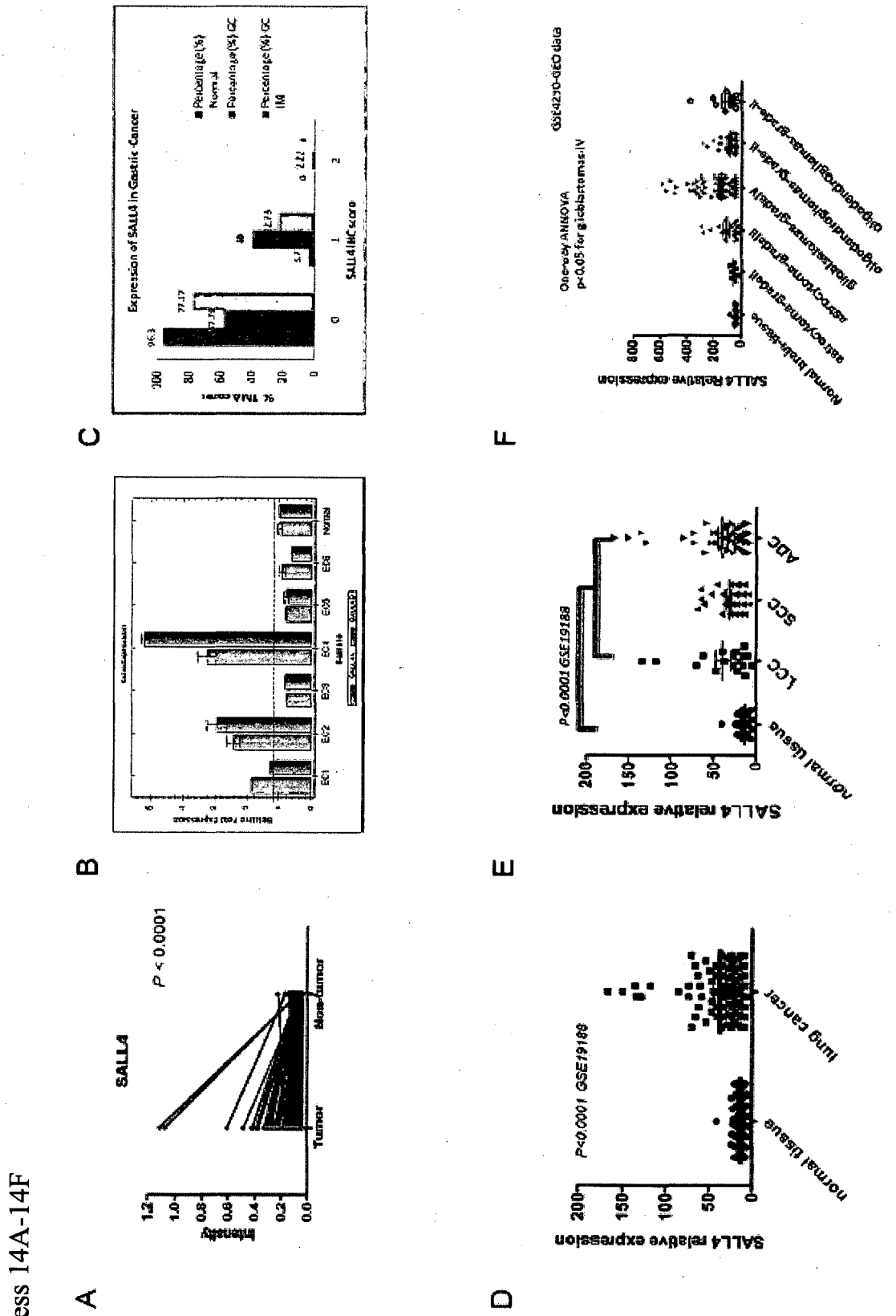


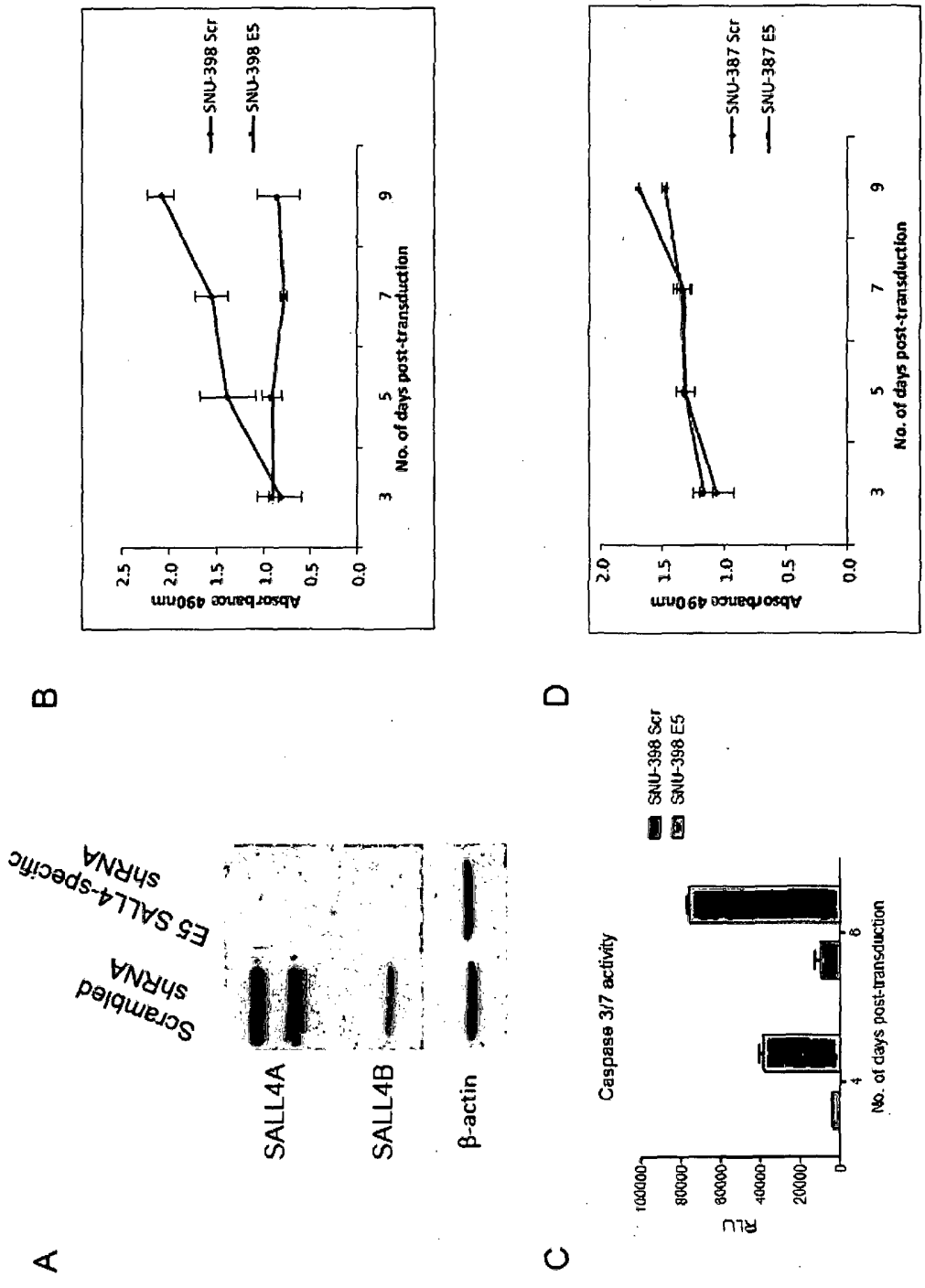
Figure 13

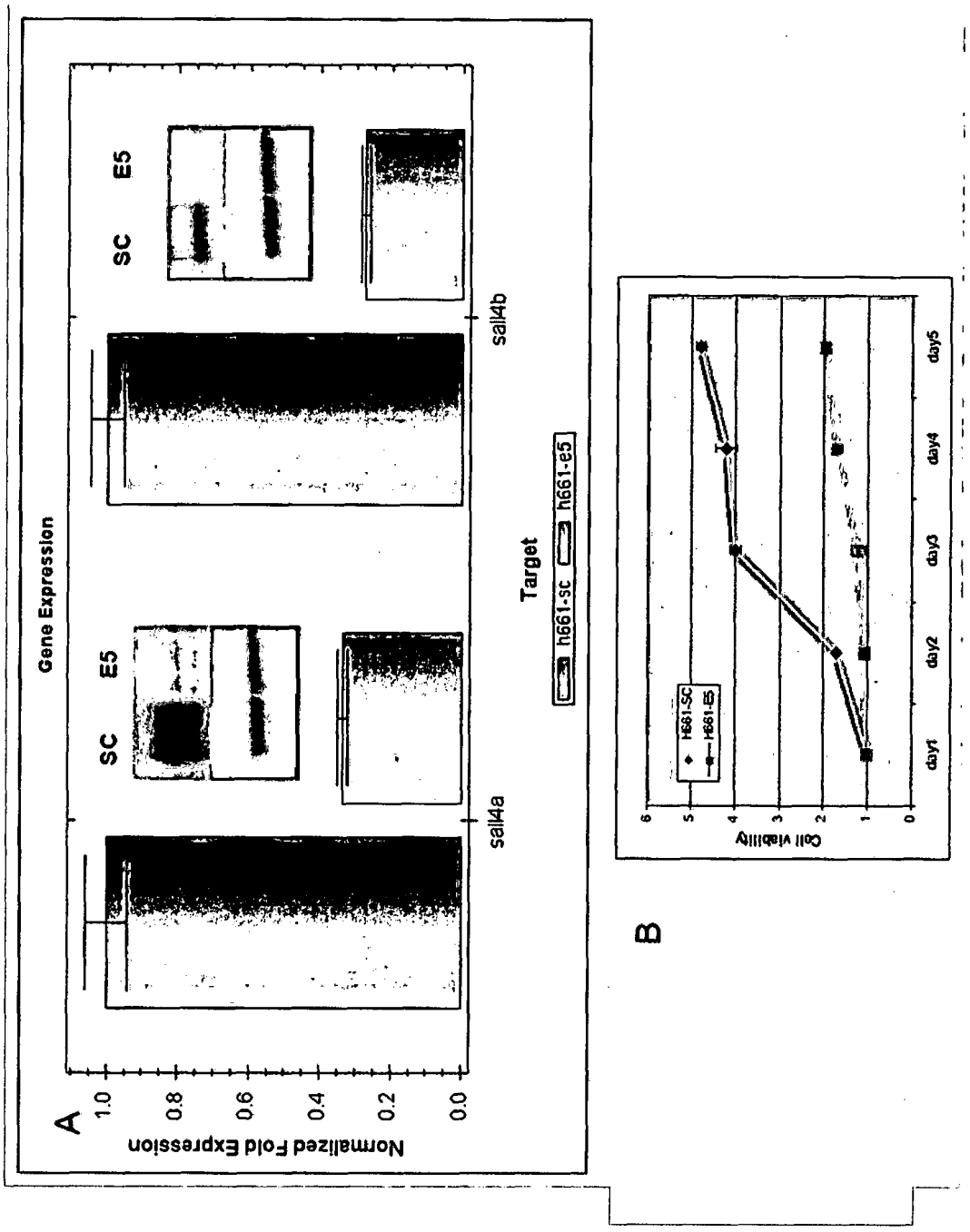

A
HDAC
SALL4
PTEN
HDAC
Peptide or small molecule
SALL4
PTEN
B
HDAC
Peptide or small molecule
SALL4
C
HDAC
Peptide or small molecule



Figuress 14A-14F

Figures 15A -15D





Figures 16A and 16B

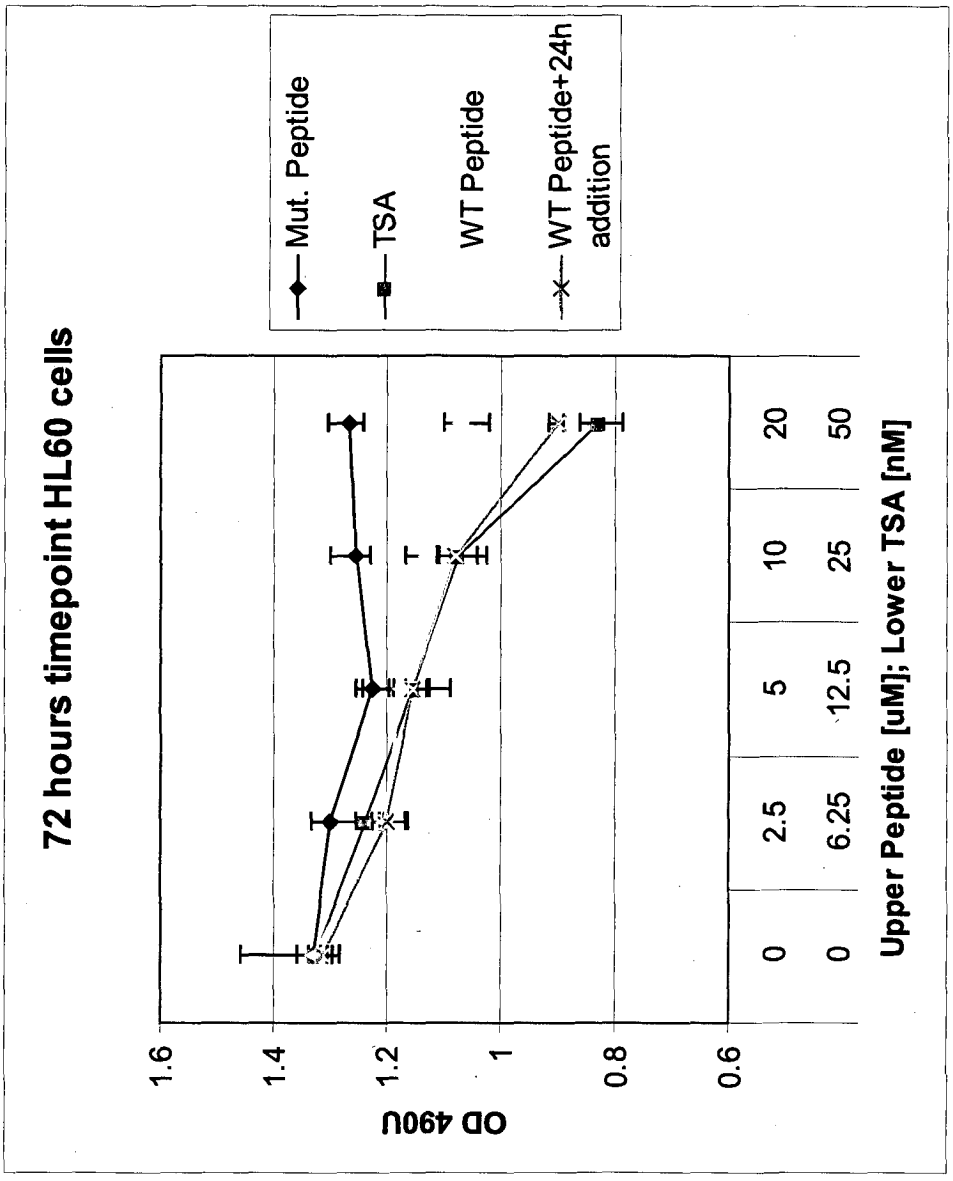

72 hours timepoint HL60 cells
Mut. Peptide
TSA
WT Peptide
WT Peptide+24h addition
OD 490U
1.6
1.4
1.2
1
0.8
0.6
0
0
2.5
6.25
5
12.5
10
25
20
50
Upper Peptide [uM]; Lower TSA [nM]

Figure 17

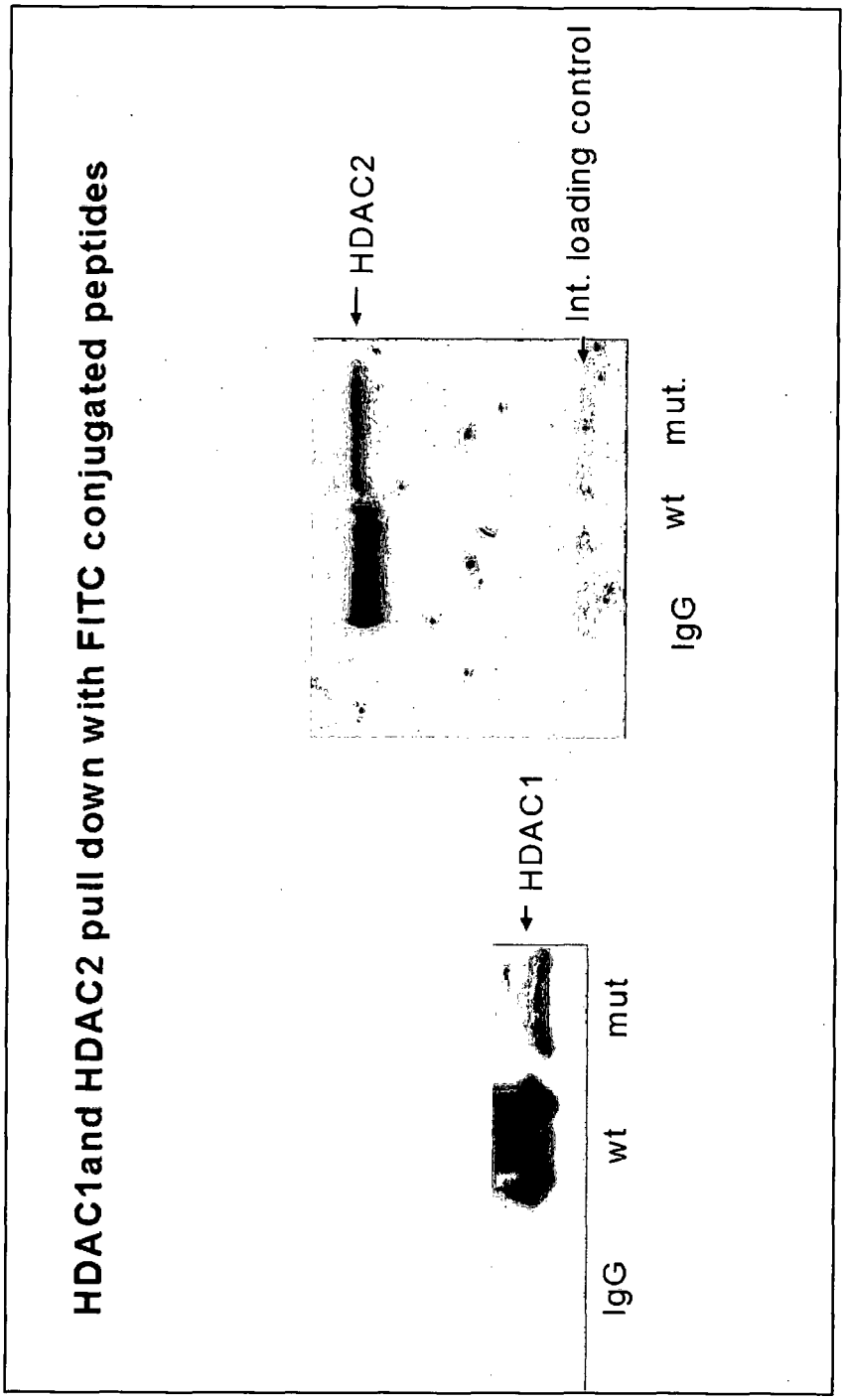

HDAC1and HDAC2 pull down with FITC conjugated peptides
HDAC2
Int. loading control
IgG wt mut.
HDAC1
IgG wt mut

Figure 18

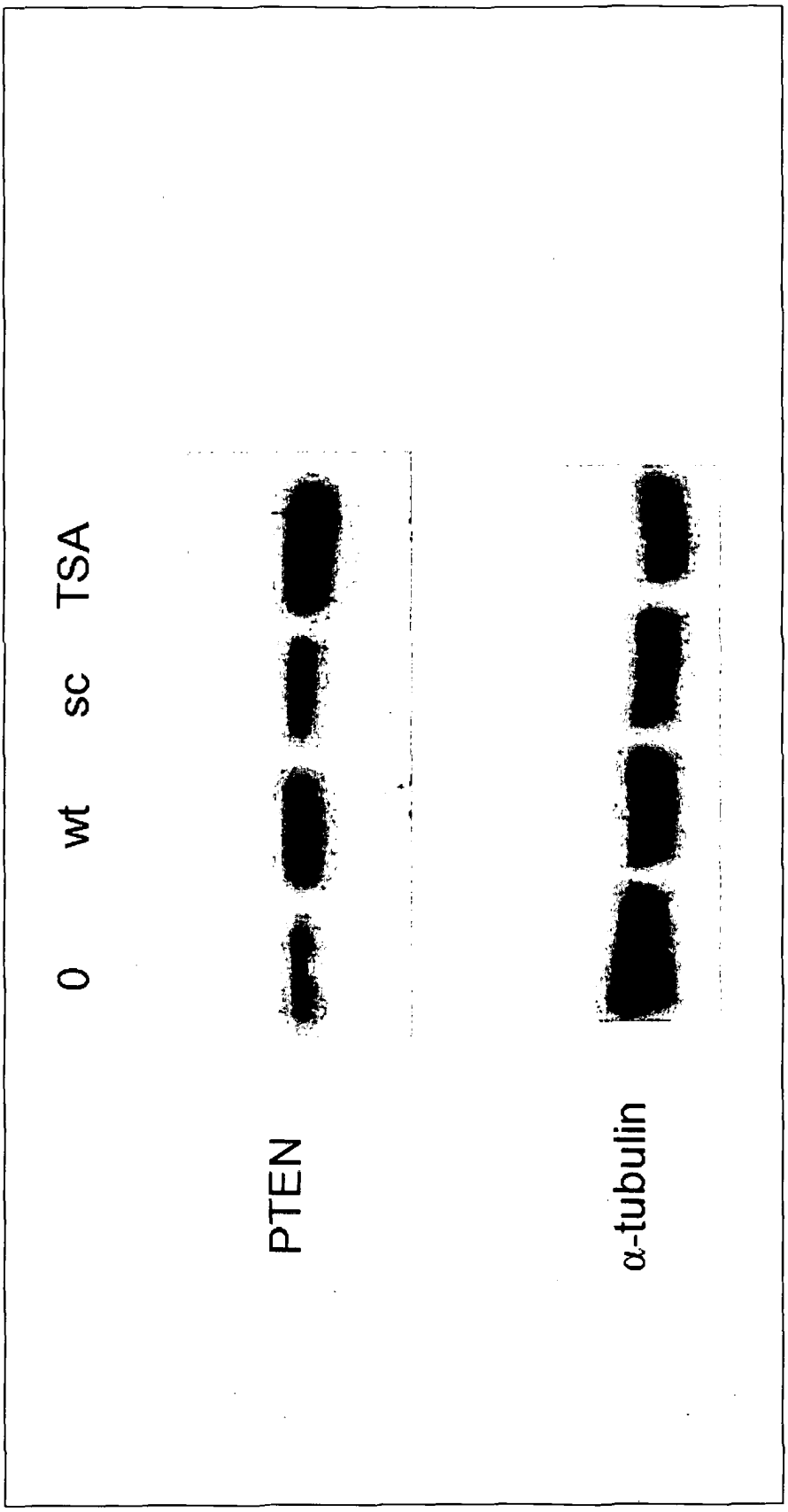
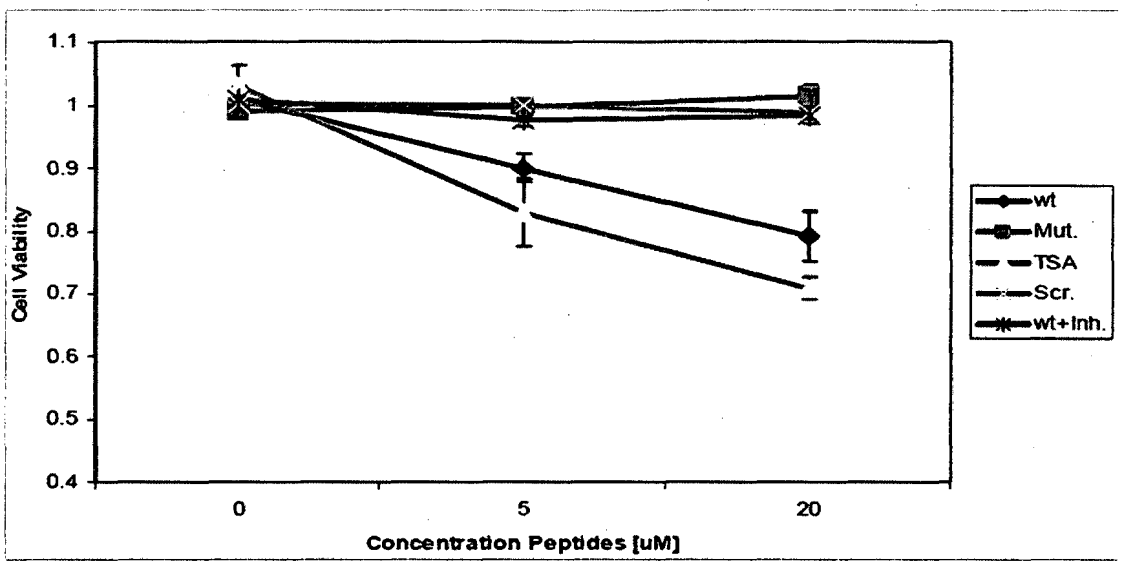


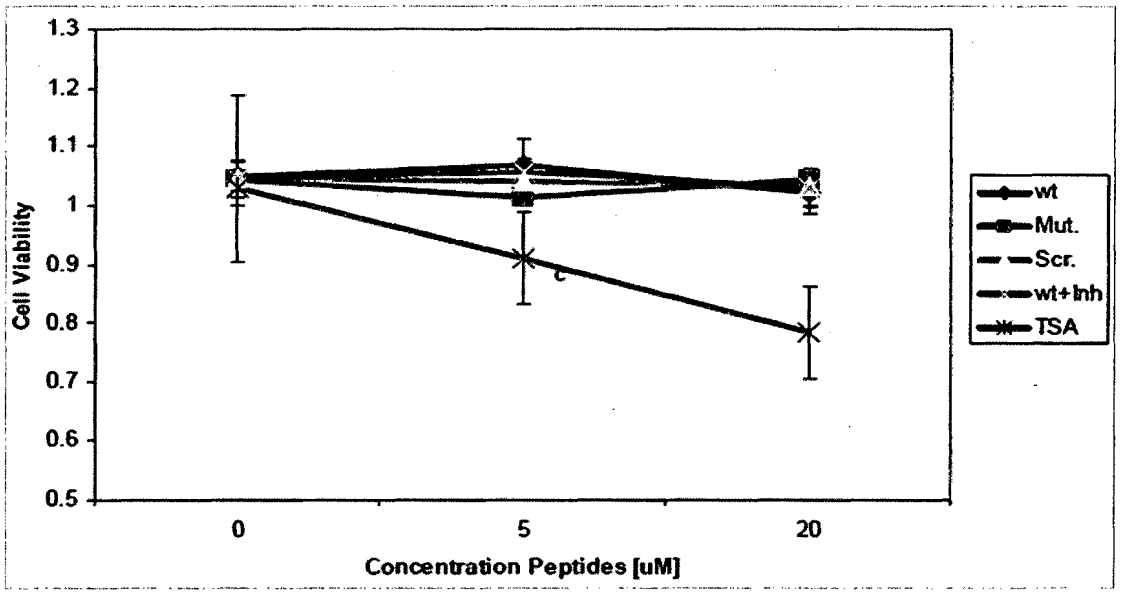
Figure 19

Figures 20A-20B

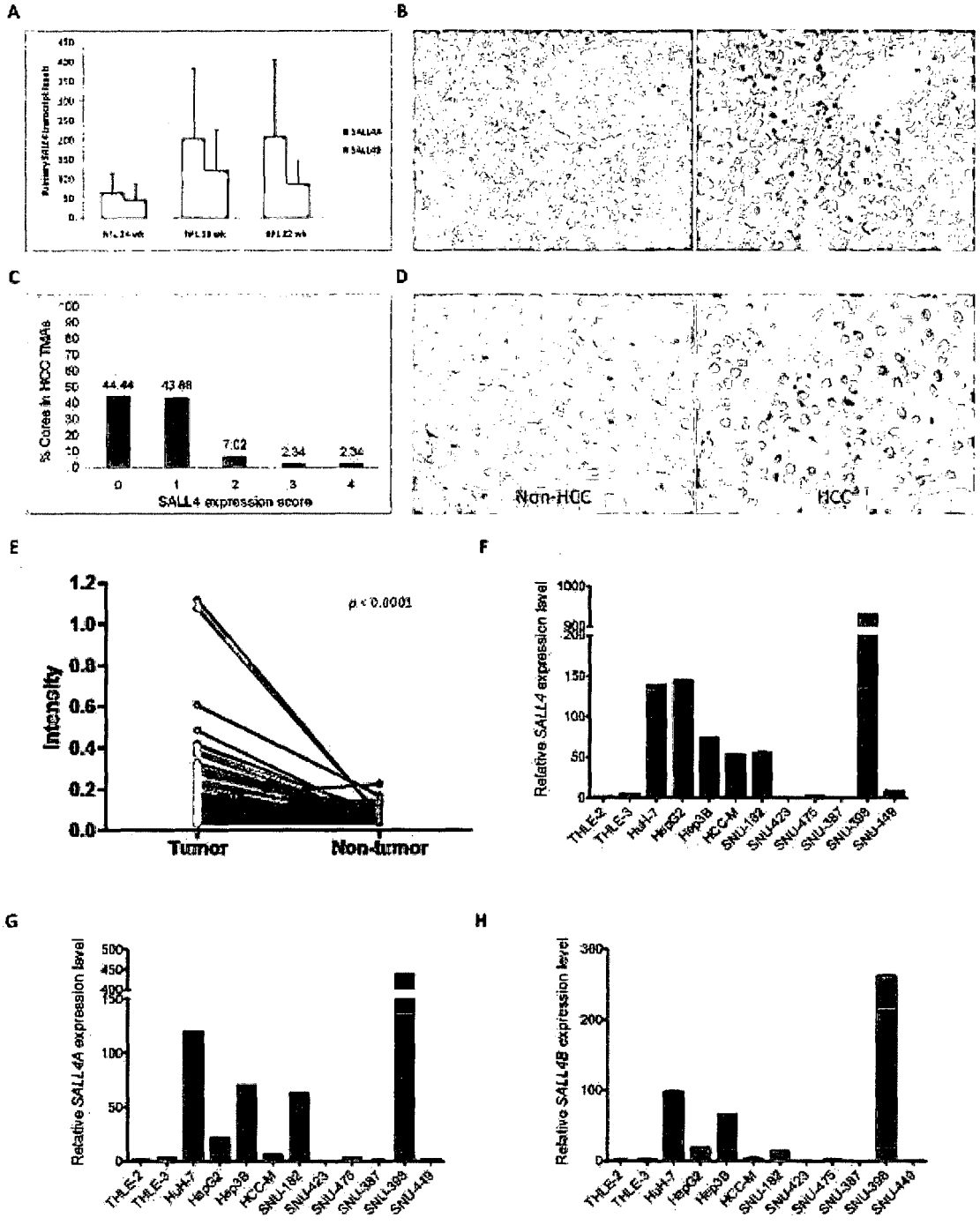
A



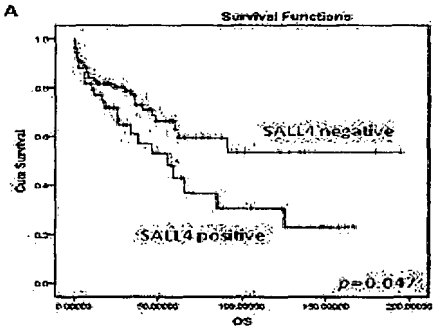
B



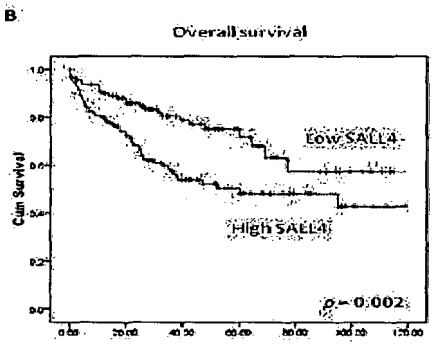
Figures 21A-21H

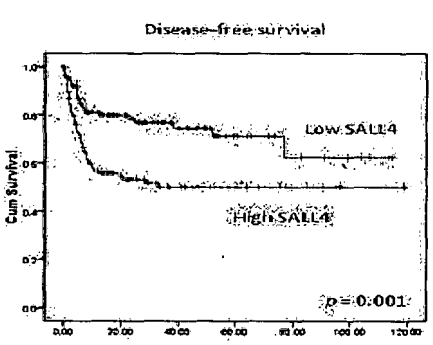


Figures 22A-22C



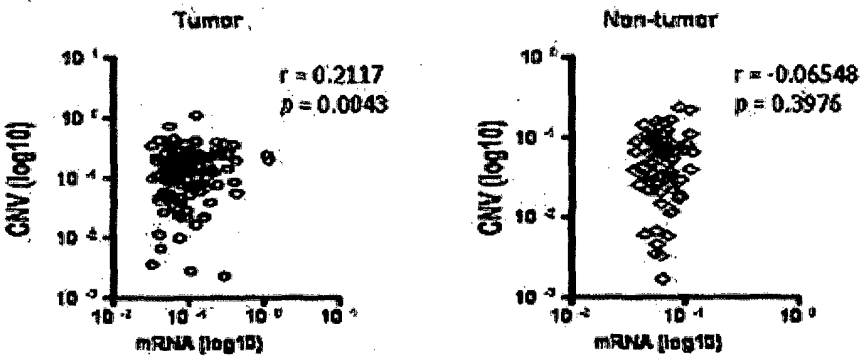
C



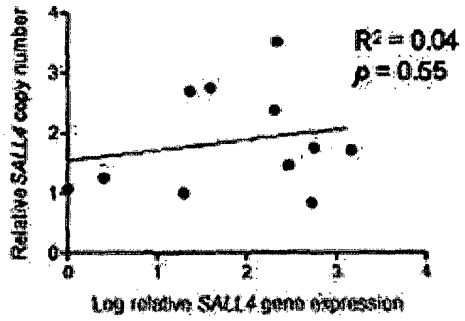


Figures 23A-23B

A

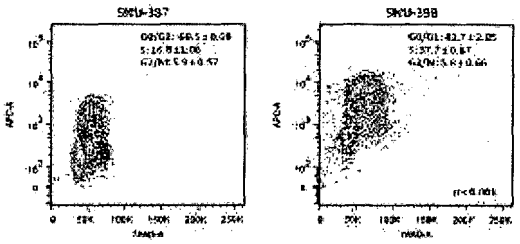


B



Figures 24A-24F

A



B

(BrdU staining)

SALL4 *in vitro* overexpression – THLE-2 and/ or THLE-3 and SNU-387

C

(*in vivo* xenotransplant assay)

SALL4 *in vitro* overexpression – THLE-2 and/ or THLE-3 and SNU-387

D

SALL4B transgenic model – with or without 2-stage chemical carcinogenesis protocol

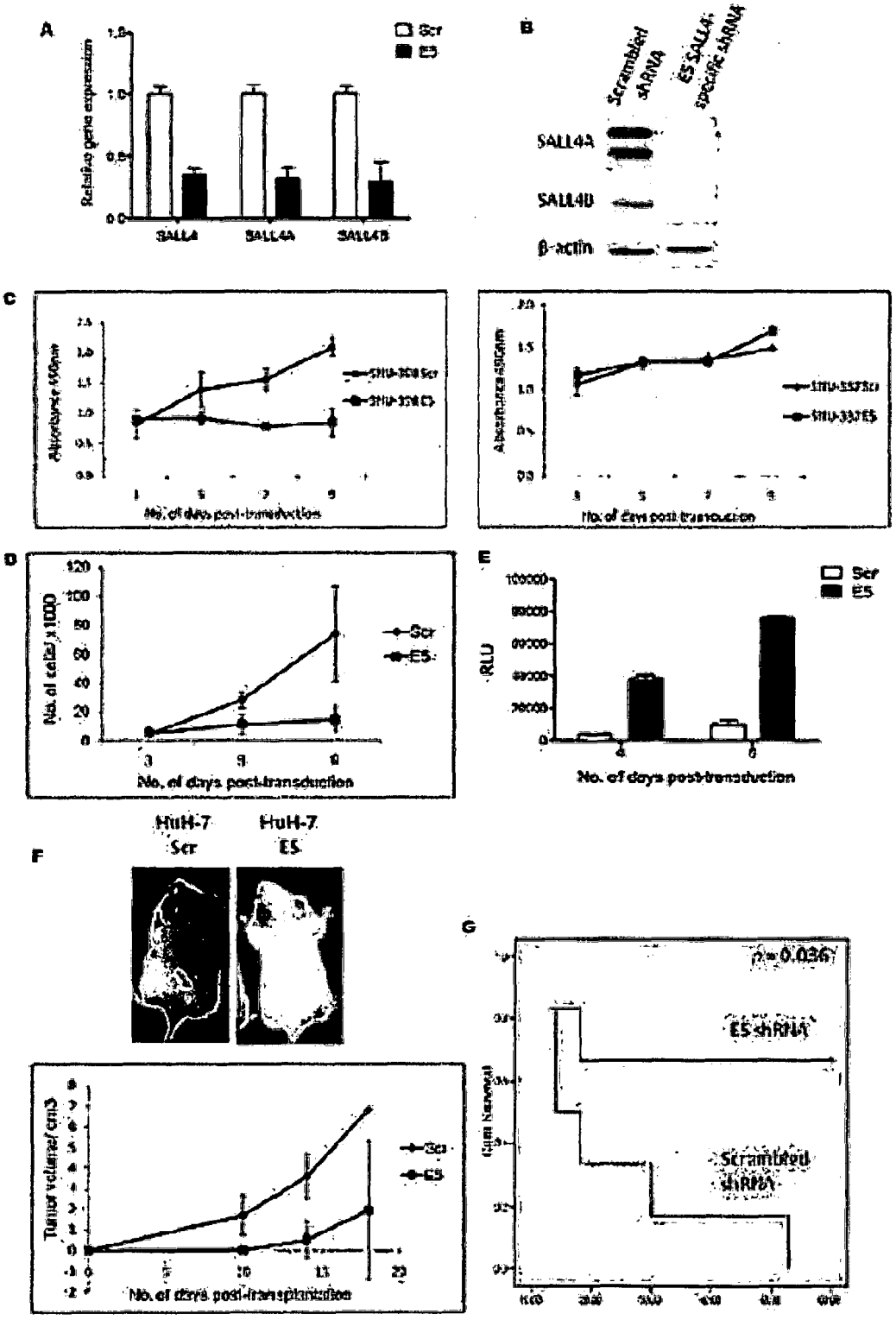
E

SALL4 *in vivo* overexpression model – Alb-TVA SALL4 overexpression model

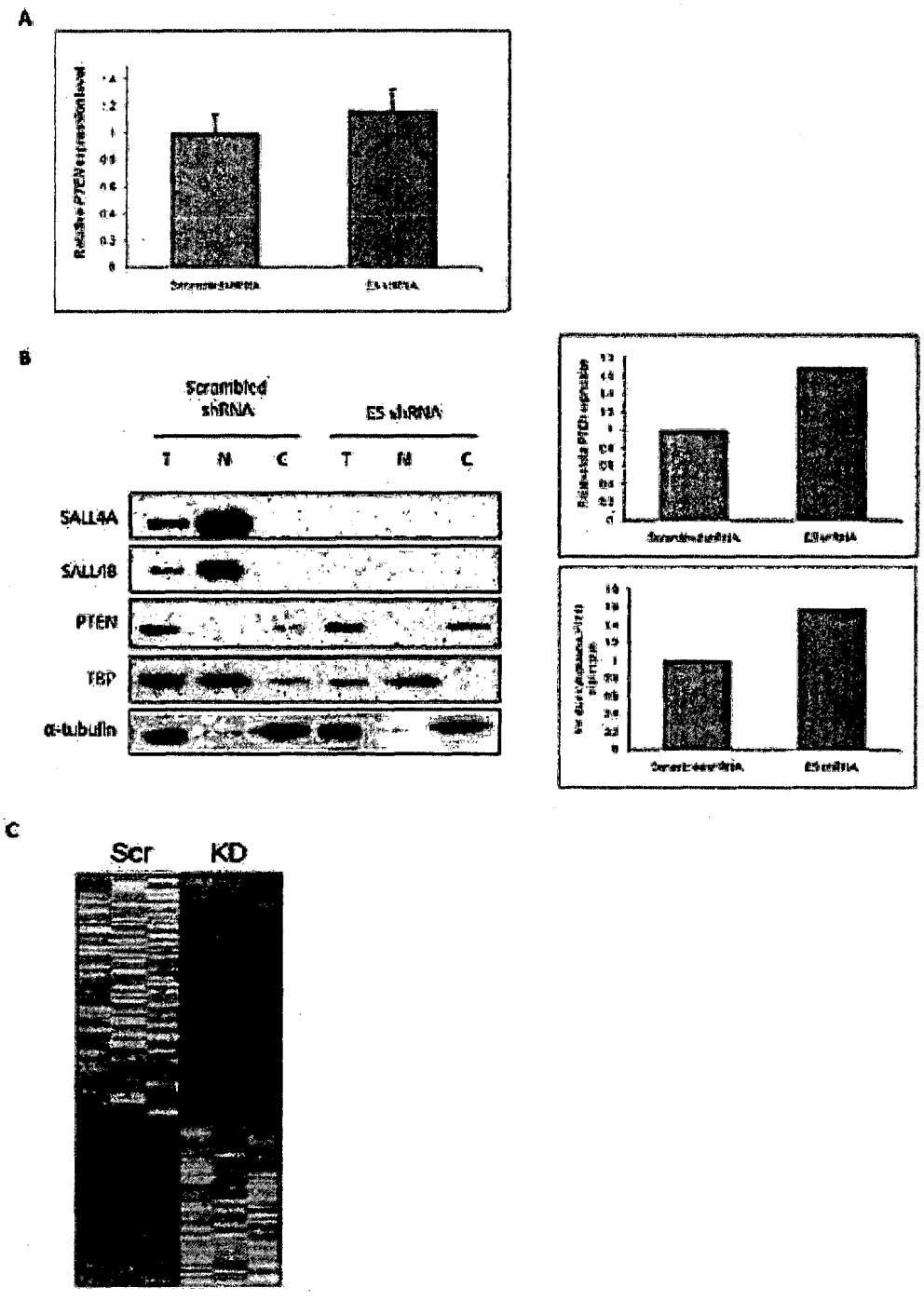
F

Liver injury (hepatectomy and/ or chemical-induced) model(s)

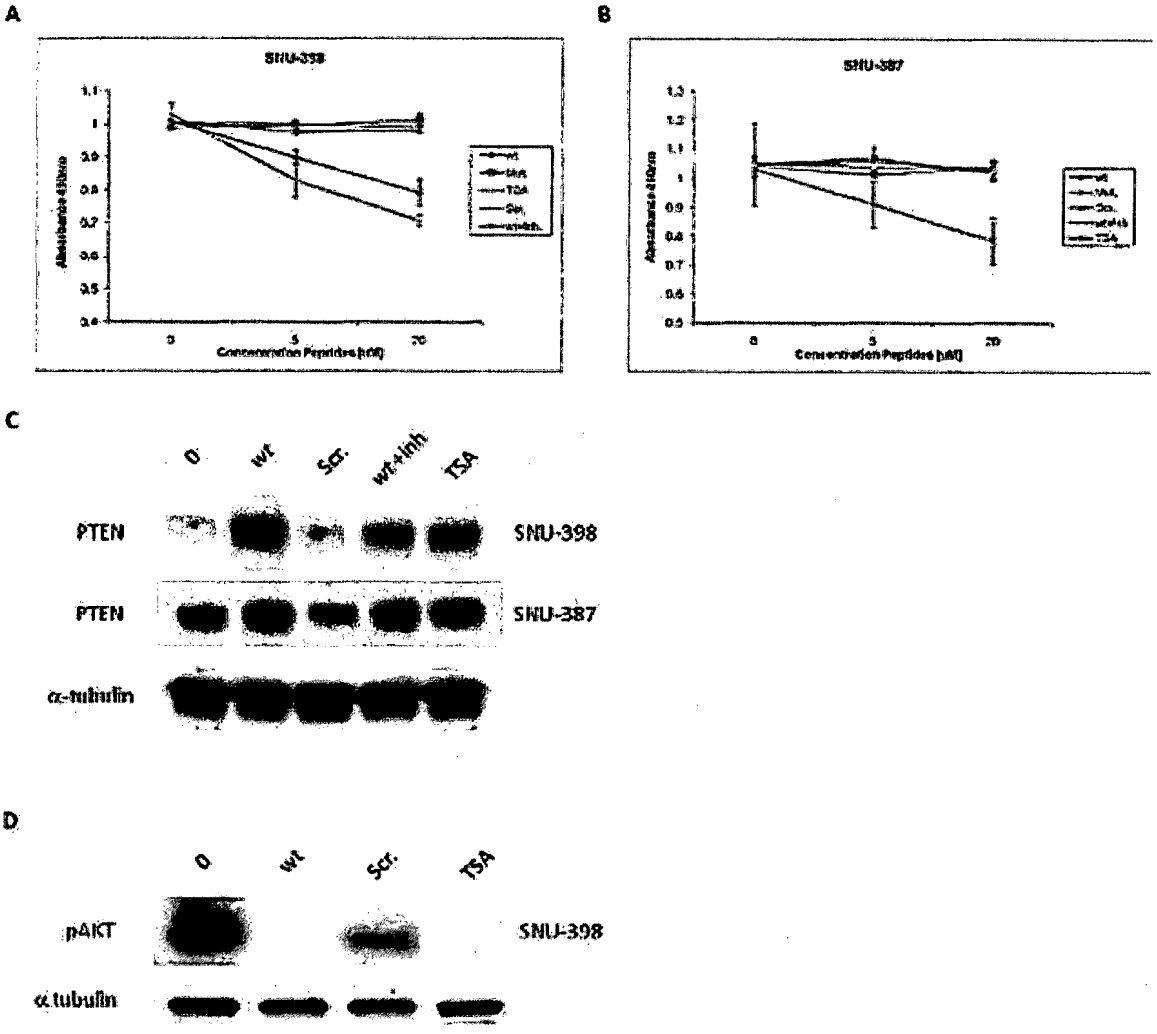
Figures 25A-25G



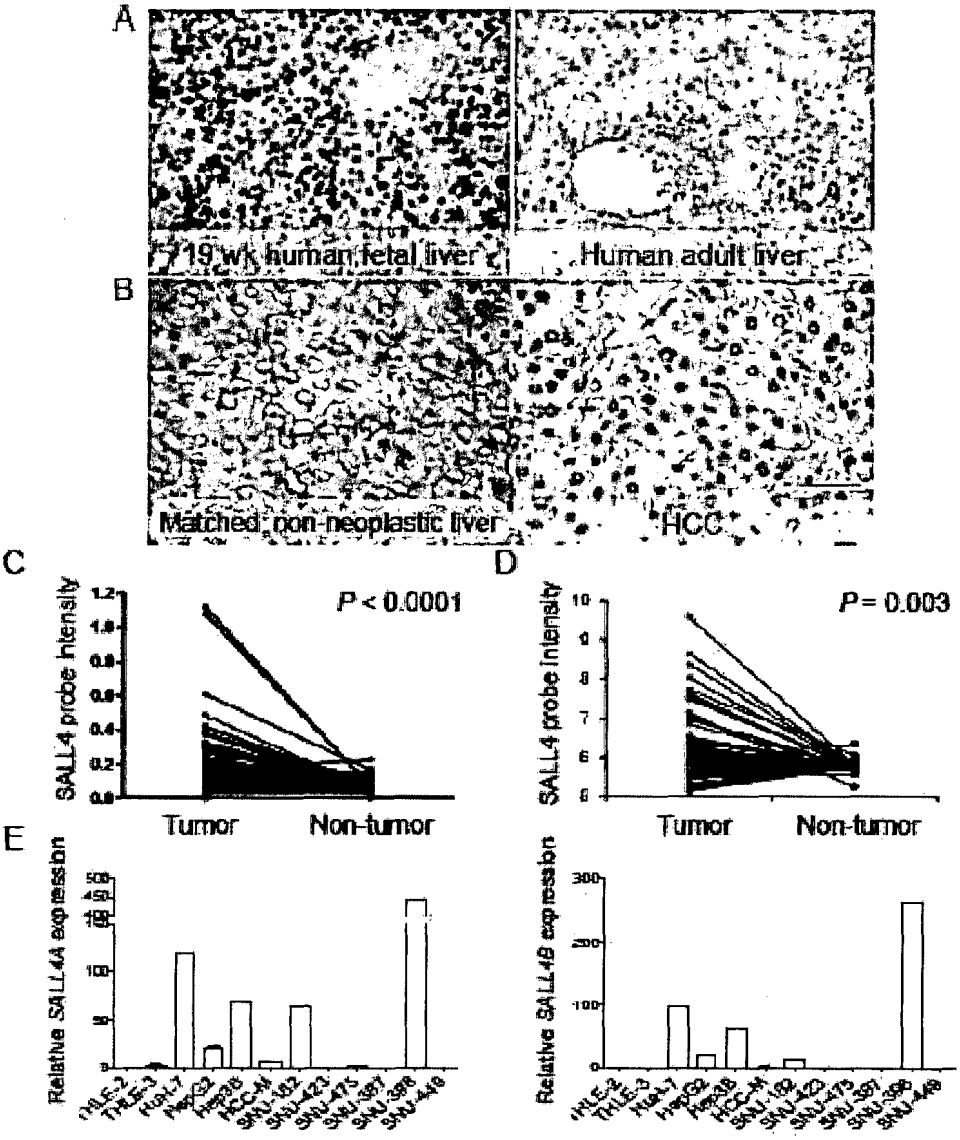
Figures 26A-26C



Figures 27A-27D



Figures 28A-28E



Figures 29A-29C

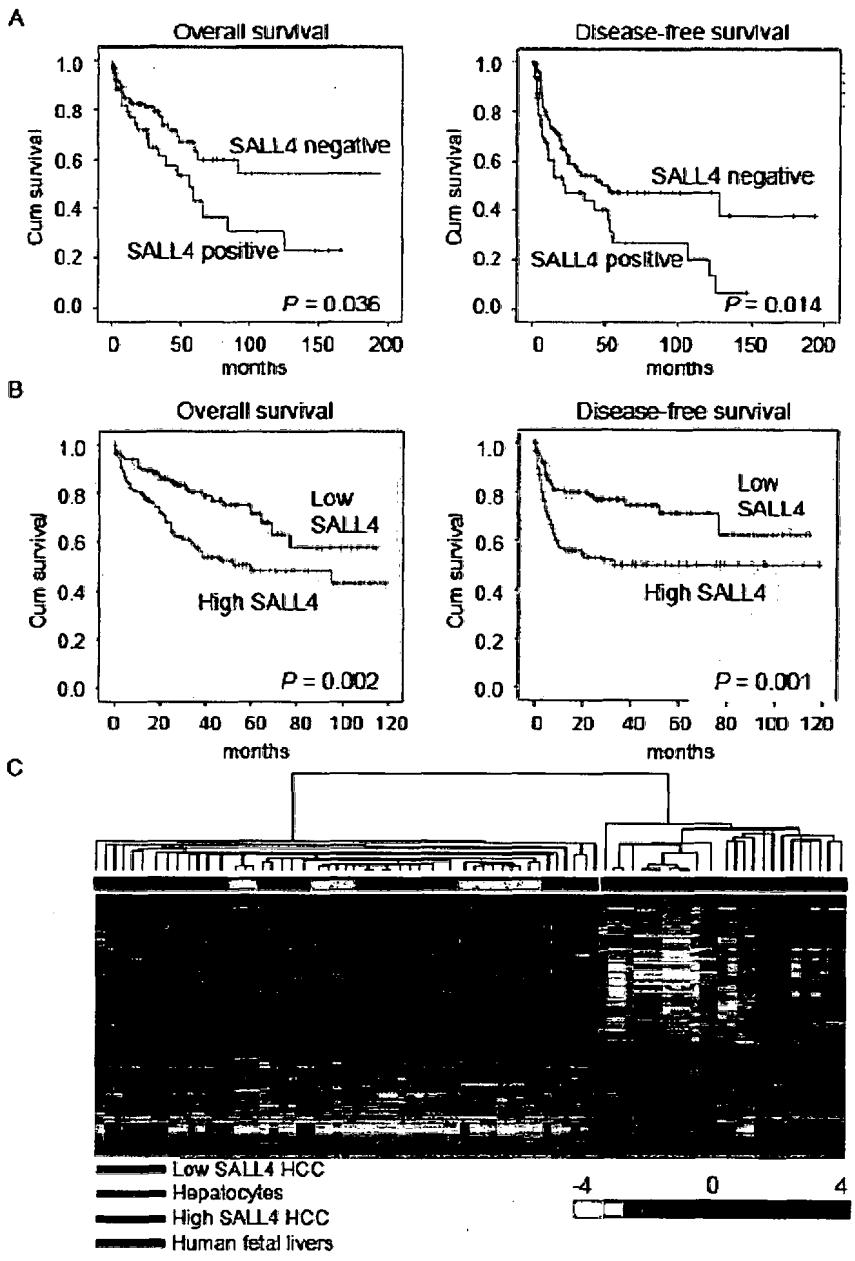
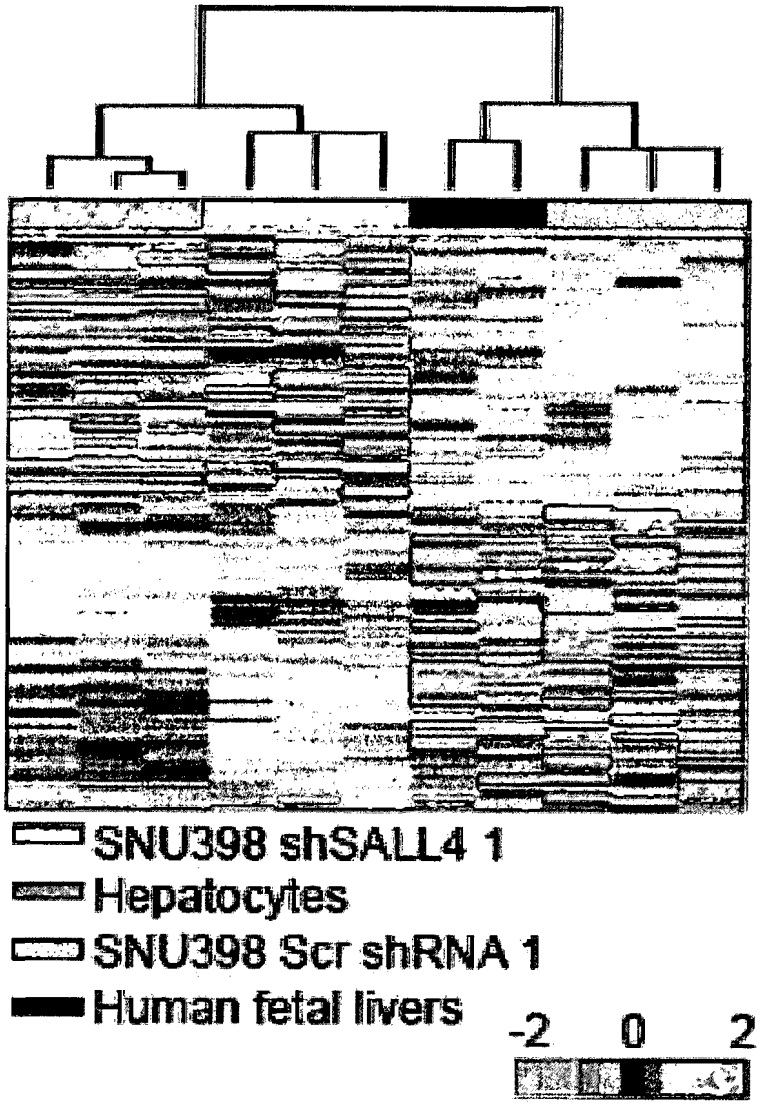
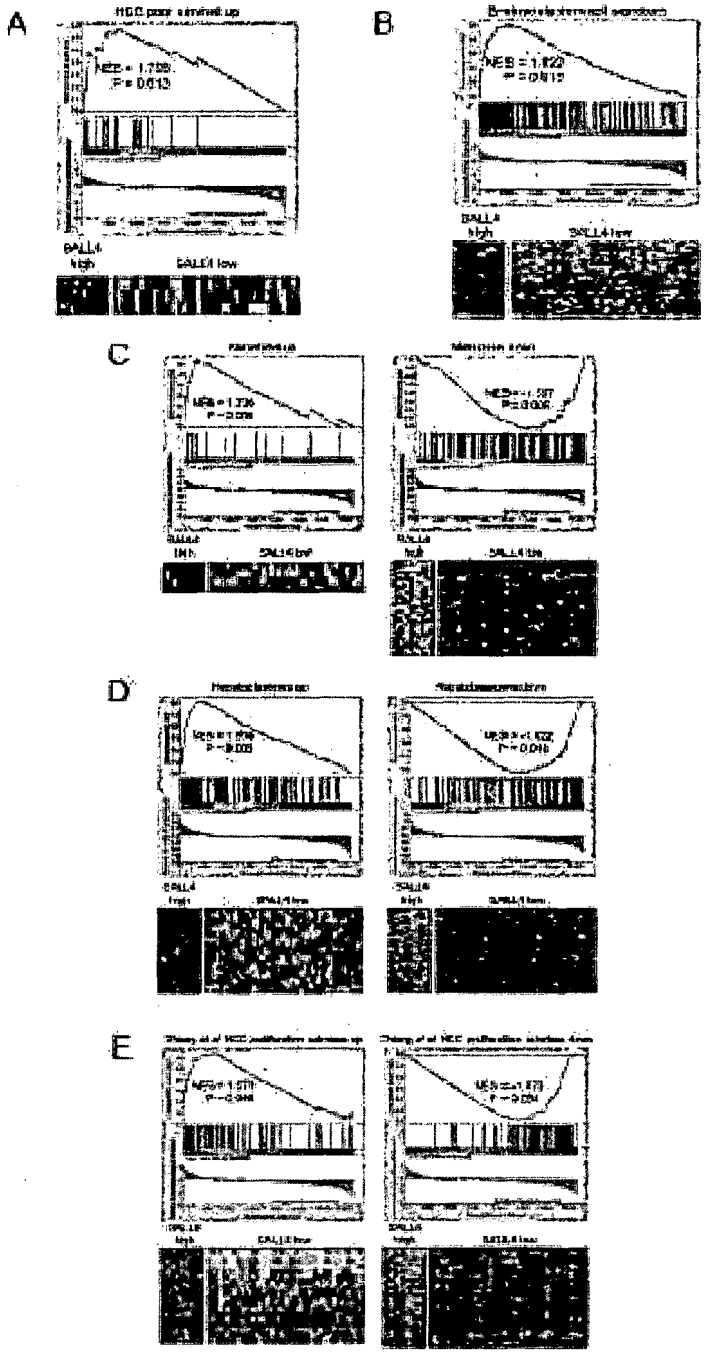


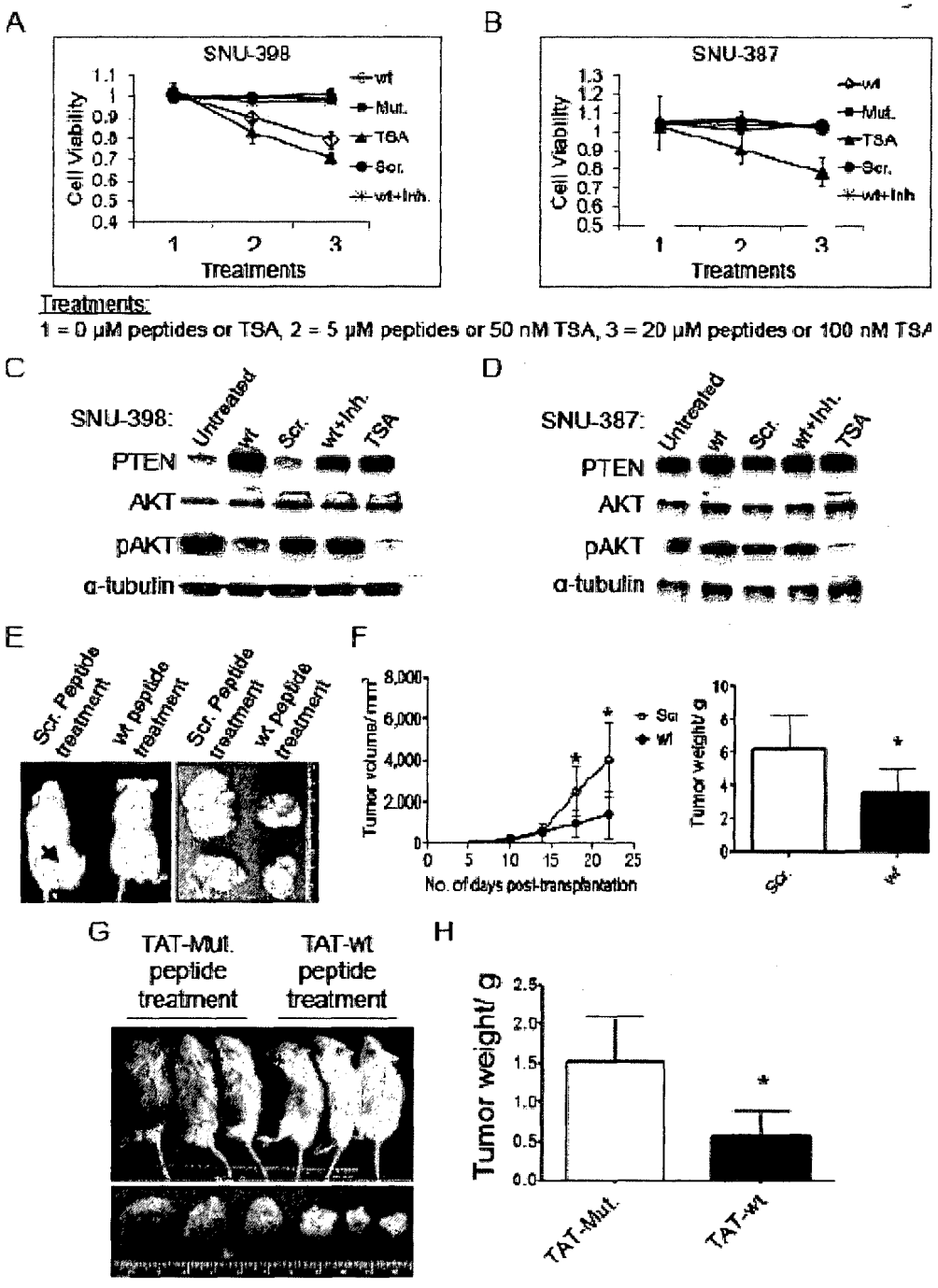
Figure 29C cont'd



Figures 30A-30E



Figures 31A-31H



Figures 32A-32F

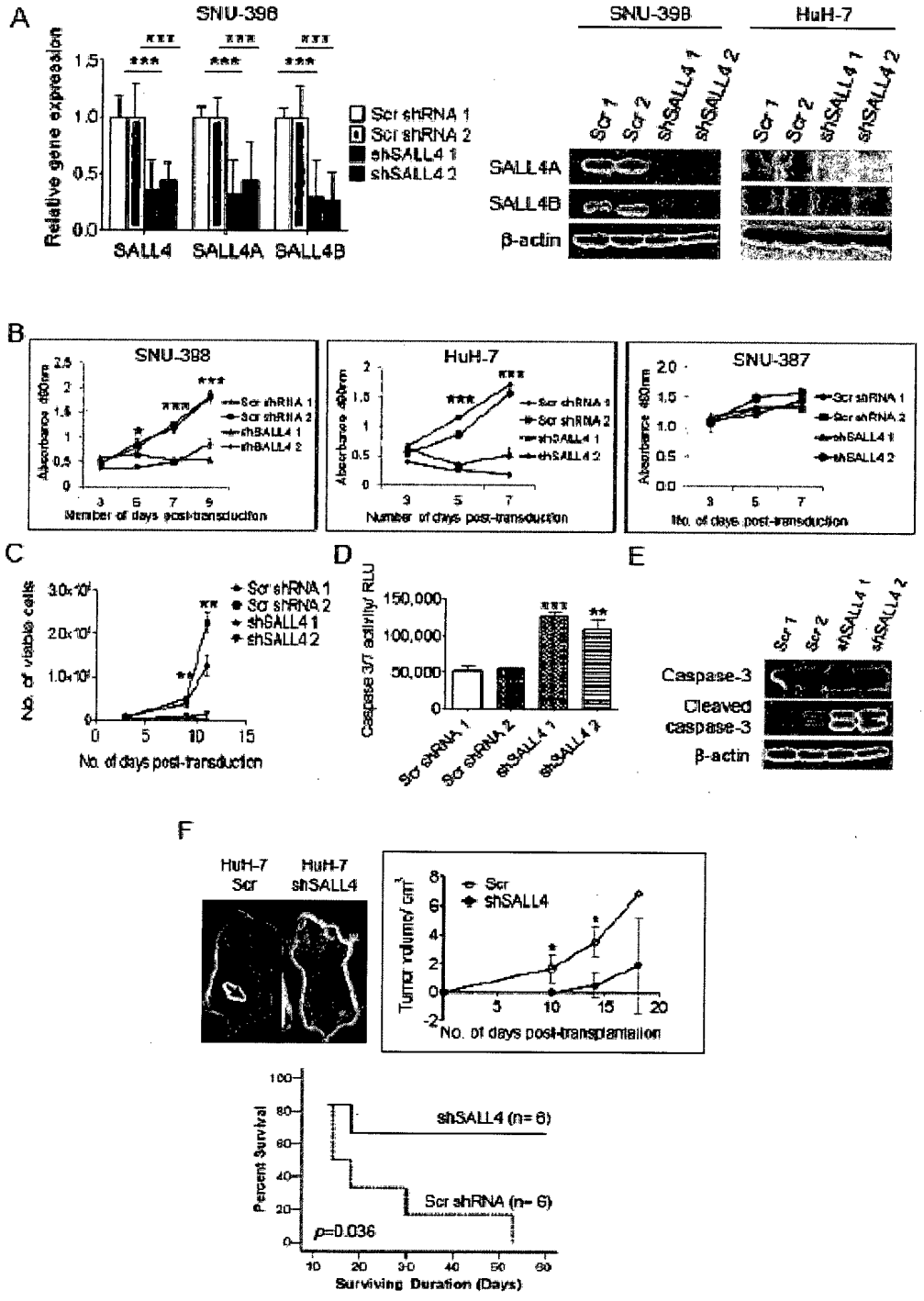
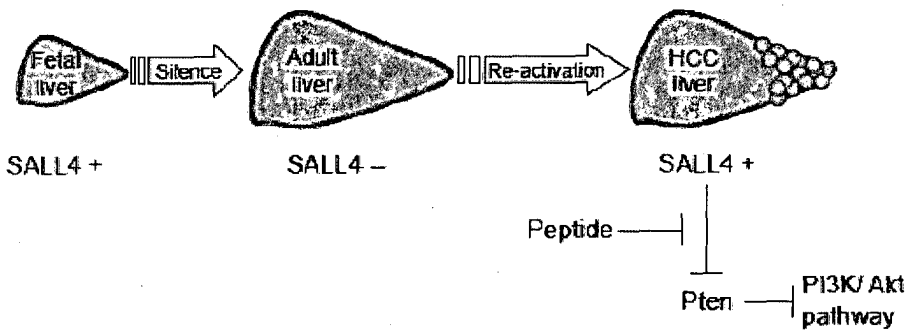
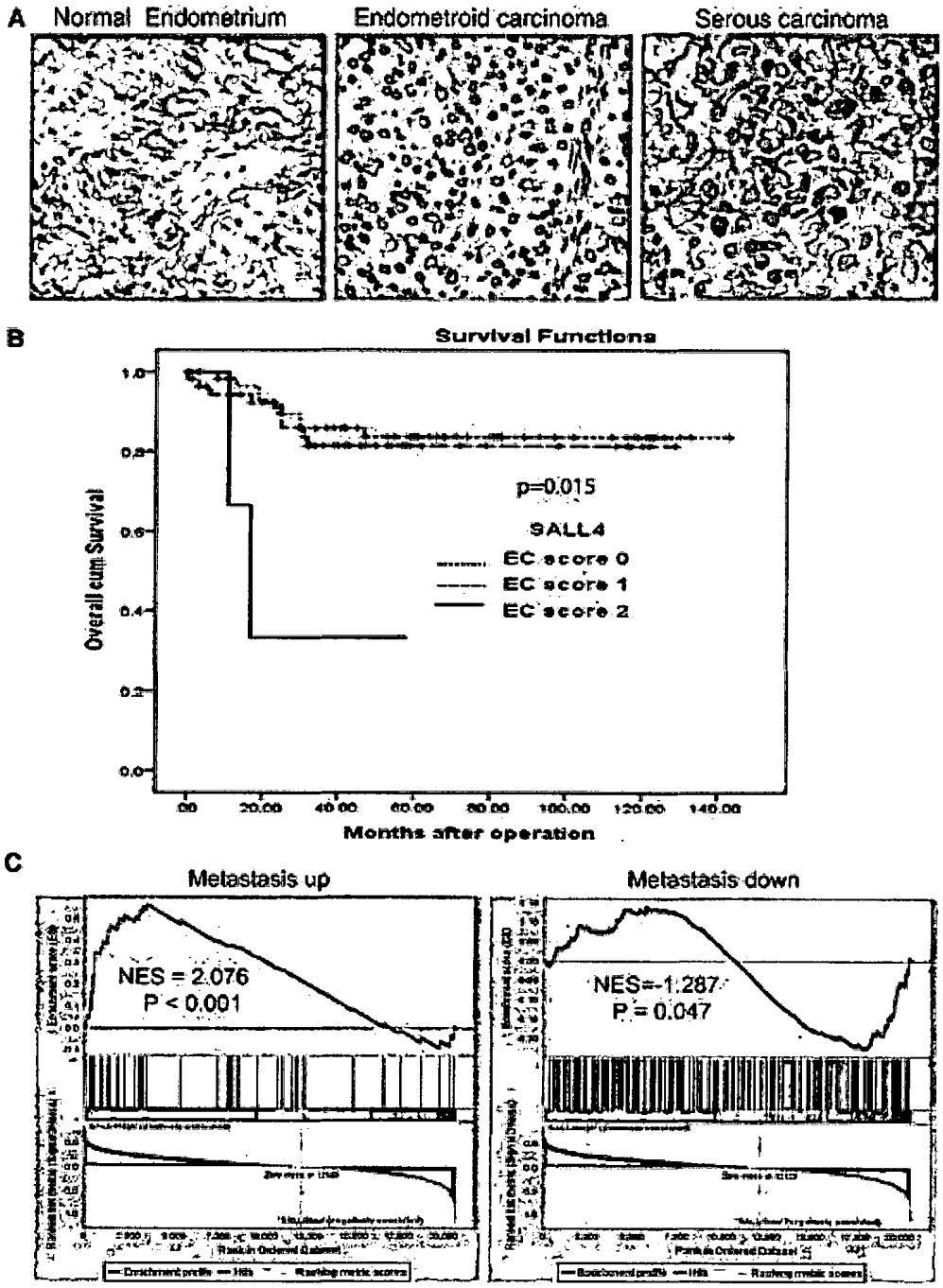


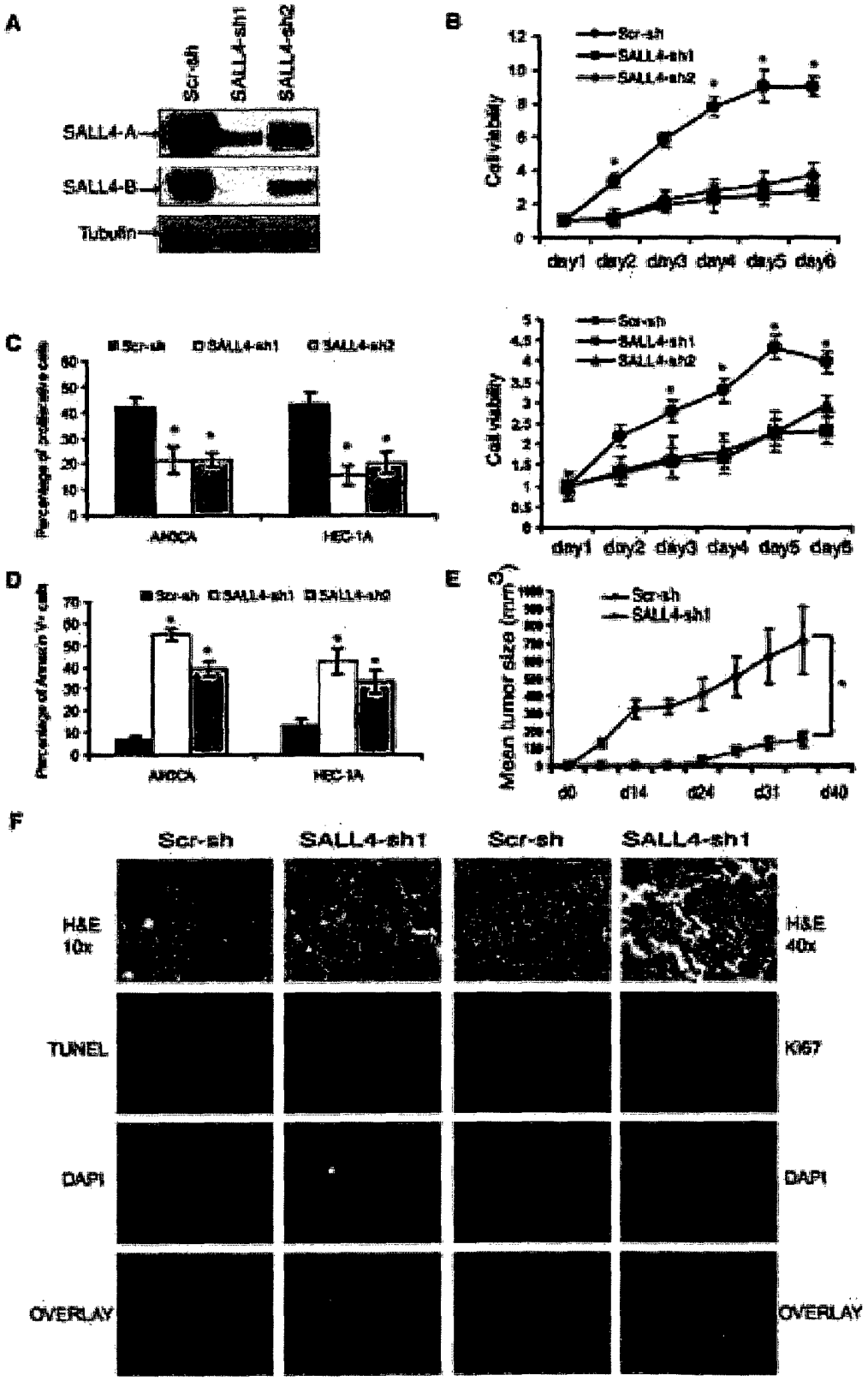
Figure 33


Fetal liver
Silence
Adult liver
Re-activation
HCC liver
SALL4 +
SALL4 –
SALL4 +
Peptide
Pten
PI3K/ Akt pathway

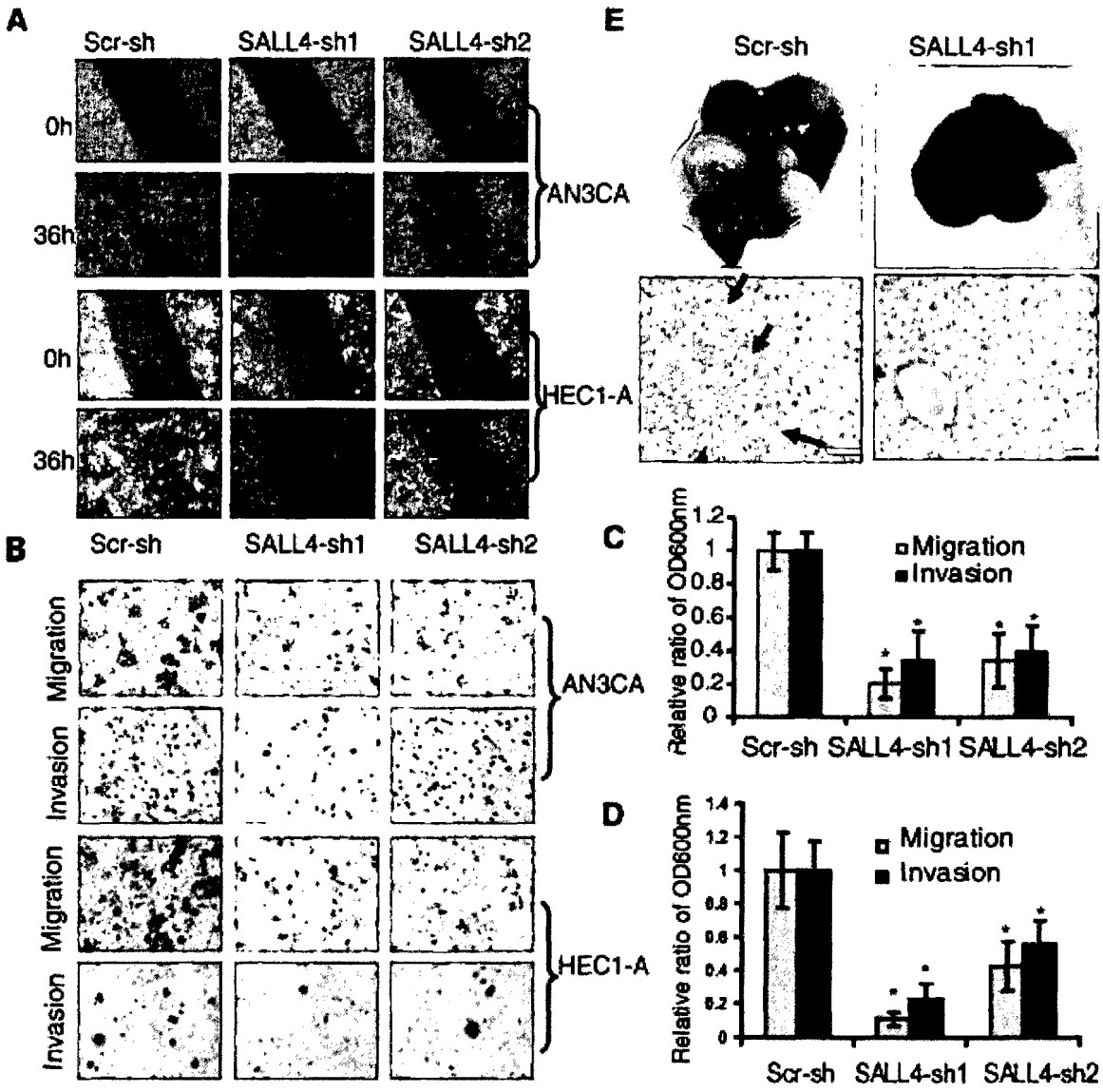
Figures 34A-34C



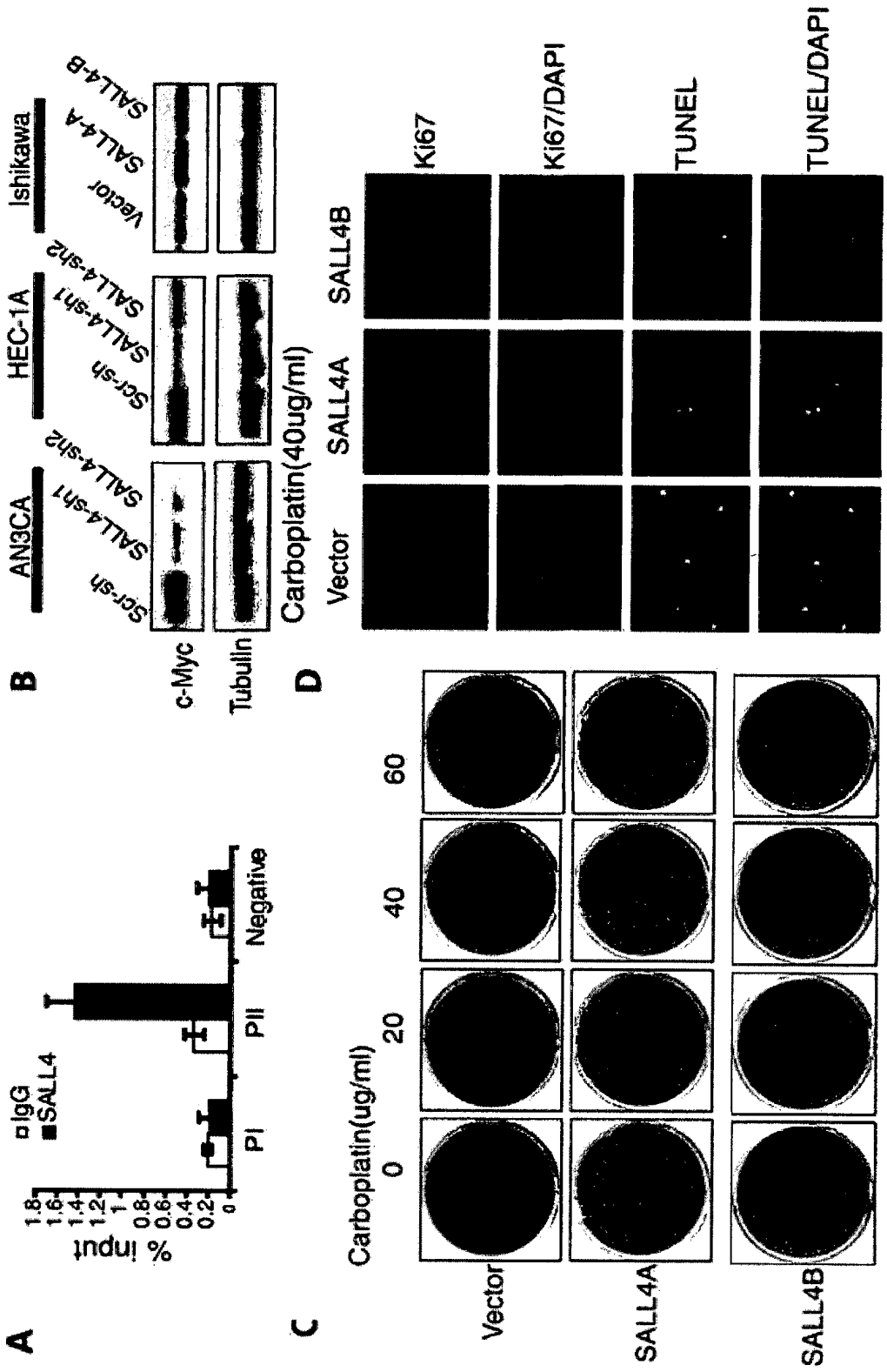
Figures 35A-35F

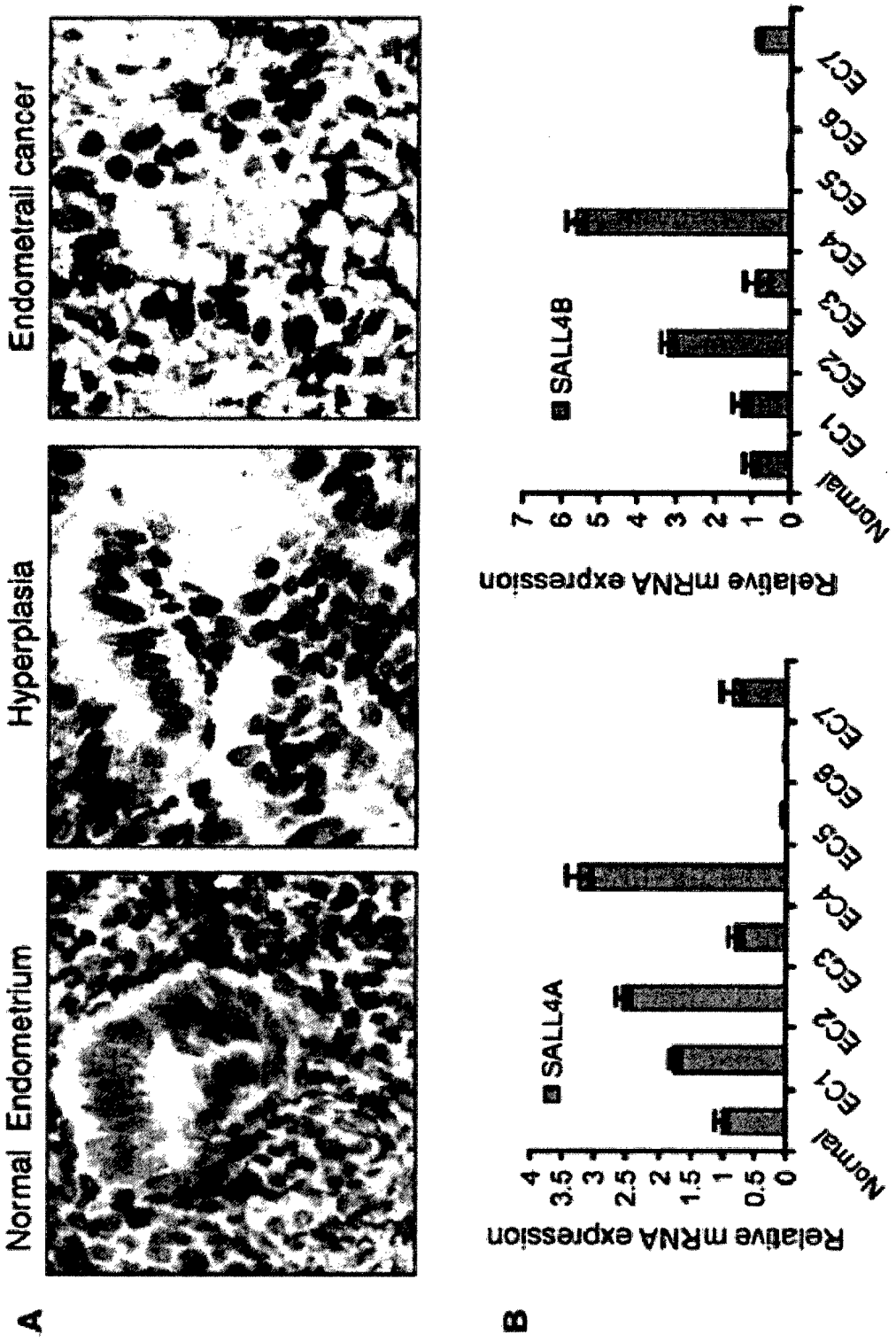


Figures 36A-36E



Figures 37A-37D





Figures 38A-38B

Figures 39A-39C

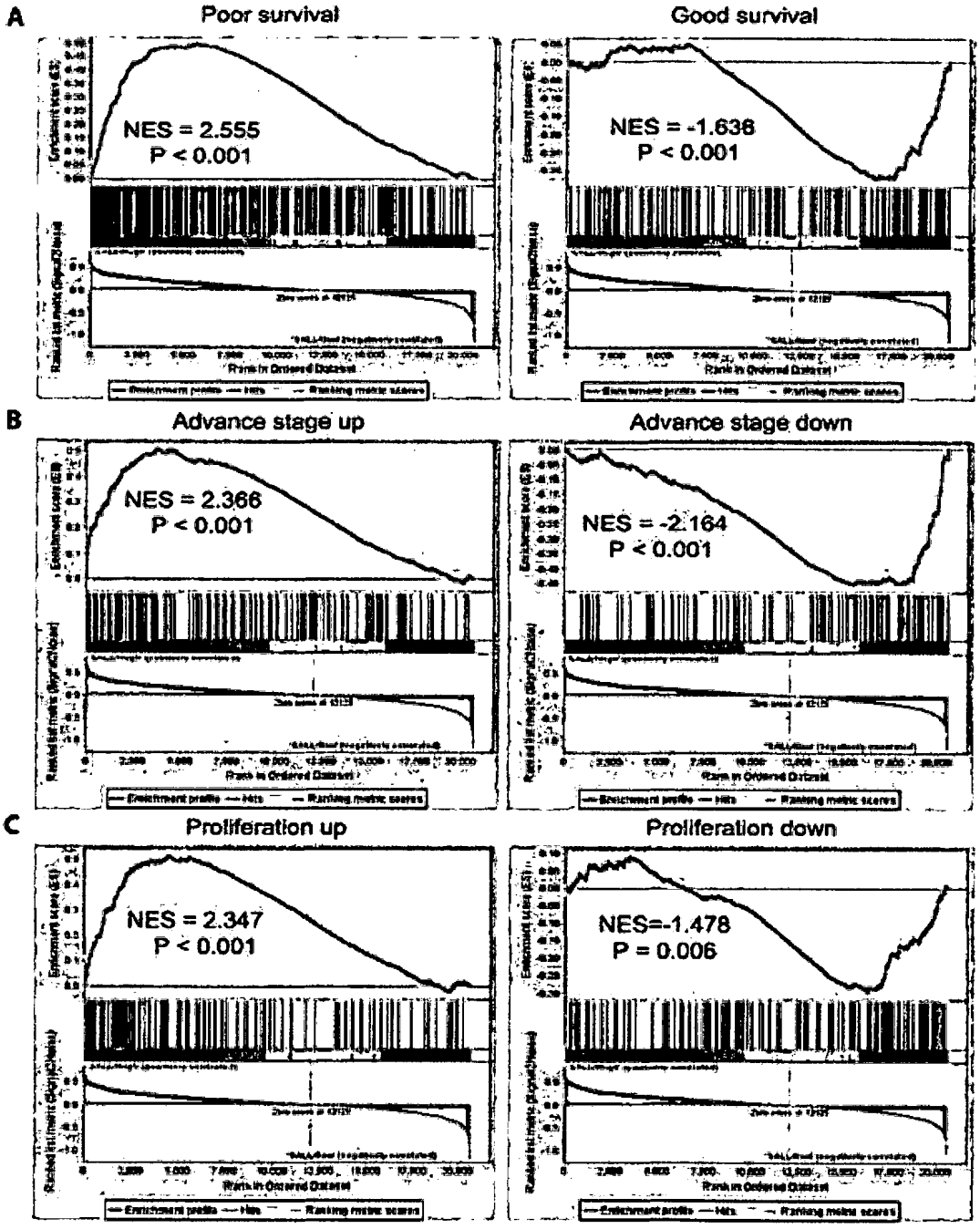
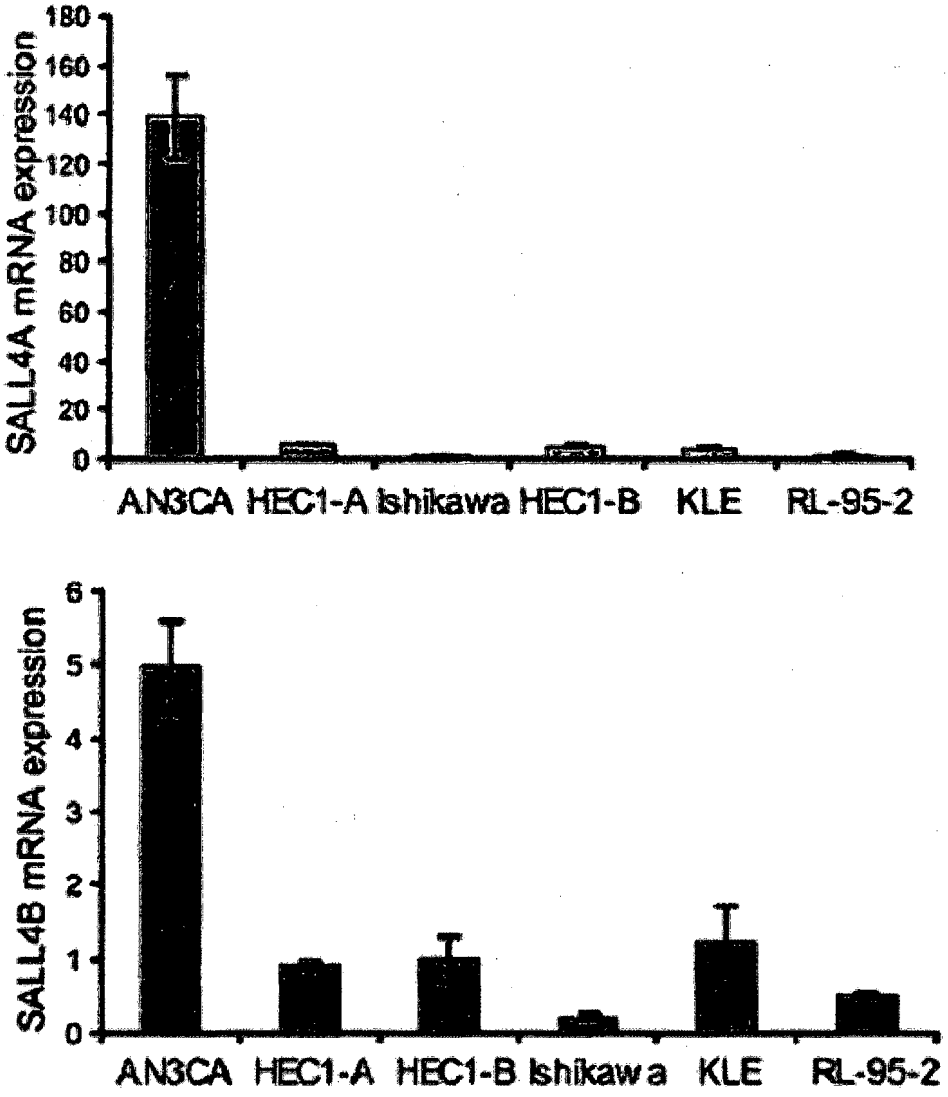


Figure 40


SALL4A mRNA expression
180
160
140
120
100
80
60
40
20
0
AN3CA
HEC1-A
Ishikawa
HEC1-B
KLE
RL-95-2
SALL4B mRNA expression
6
5
4
3
2
1
0
AN3CA
HEC1-A
HEC1-B
Ishikawa
KLE
RL-95-2

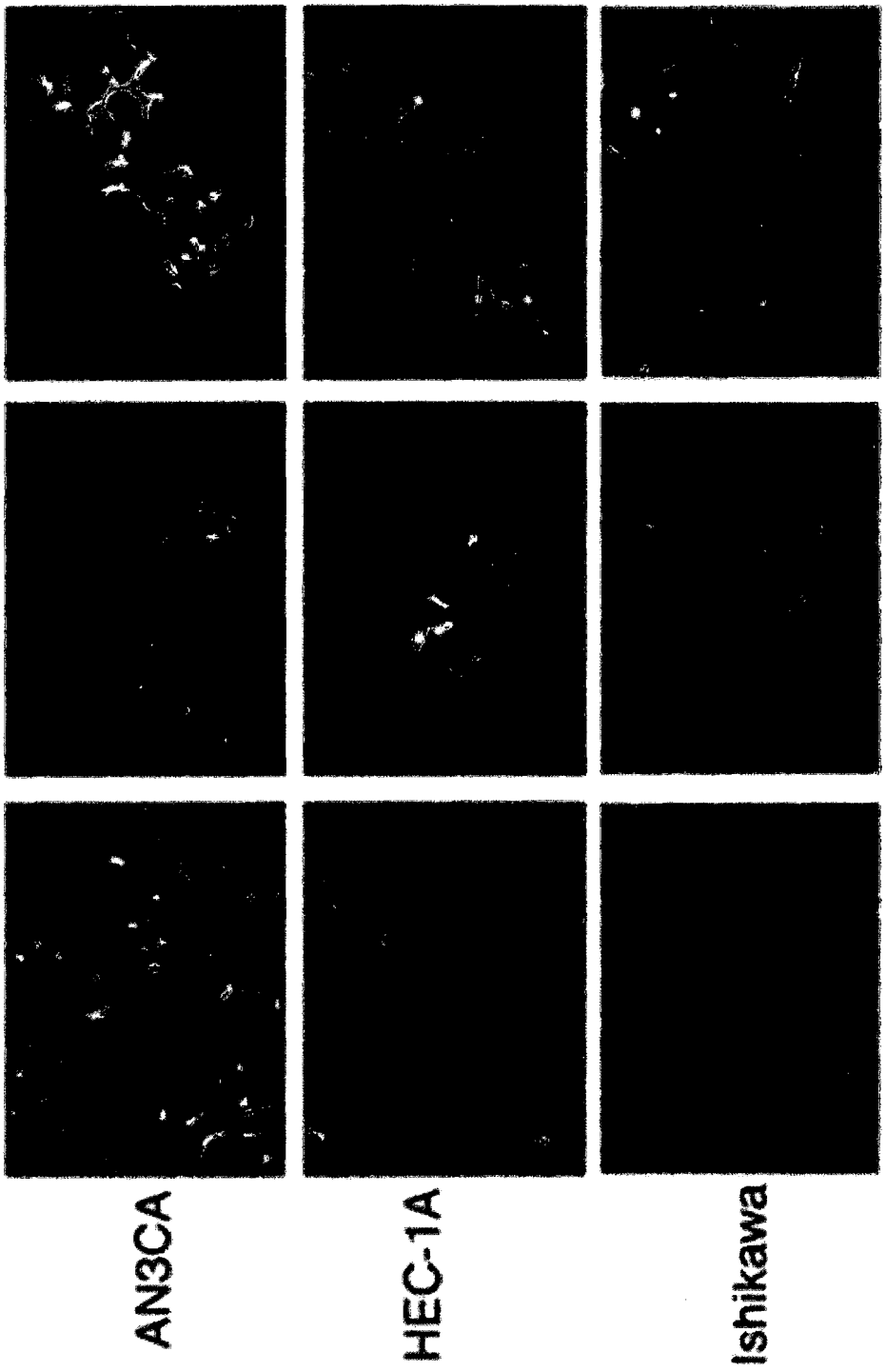


Figure 41

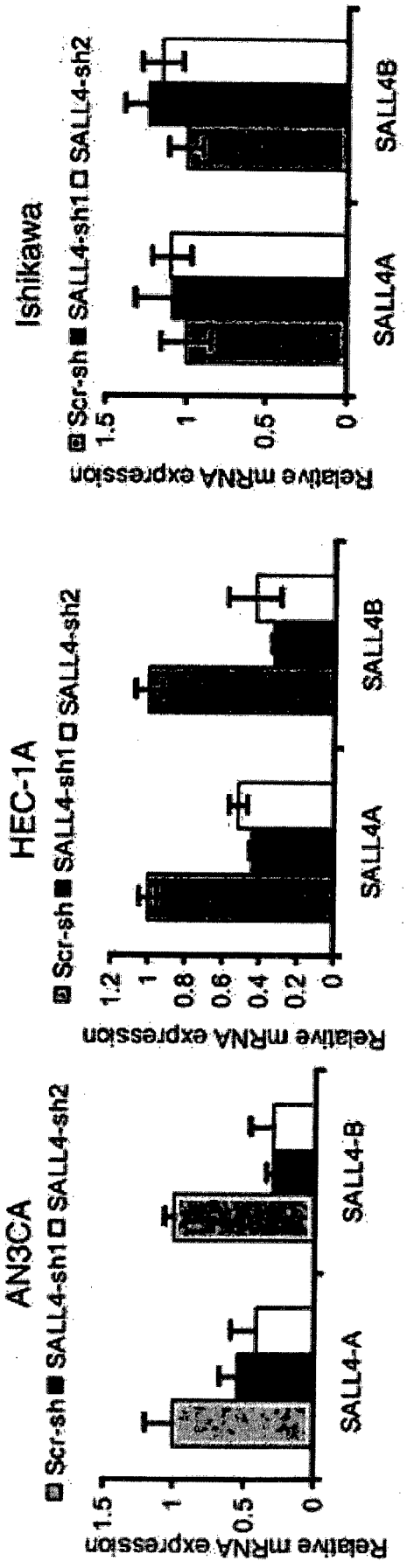
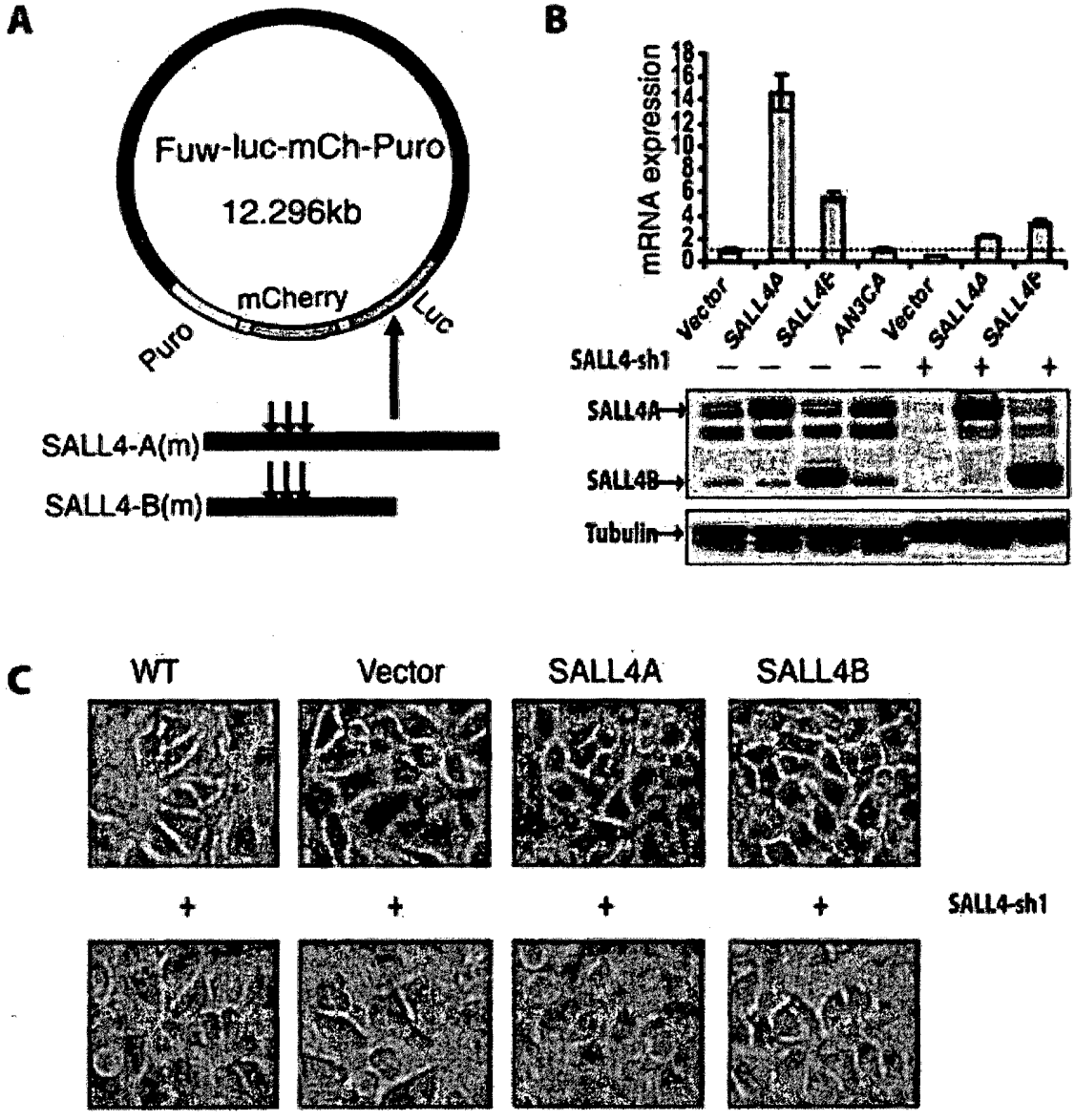

AN3CA
Scr-sh
SALL4-sh1
SALL4-sh2
Relative mRNA expression
1.5
1
0.5
0
SALL4-A
SALL4-B
HEC-1A
Scr-sh
SALL4-sh1
SALL4-sh2
Relative mRNA expression
1.2
1
0.8
0.6
0.4
0.2
0
SALL4A
SALL4B
Ishikawa
Scr-sh
SALL4-sh1
SALL4-sh2
Relative mRNA expression
1.5
1
0.5
0
SALL4A
SALL4B

Figure 42

Figures 43A-43C



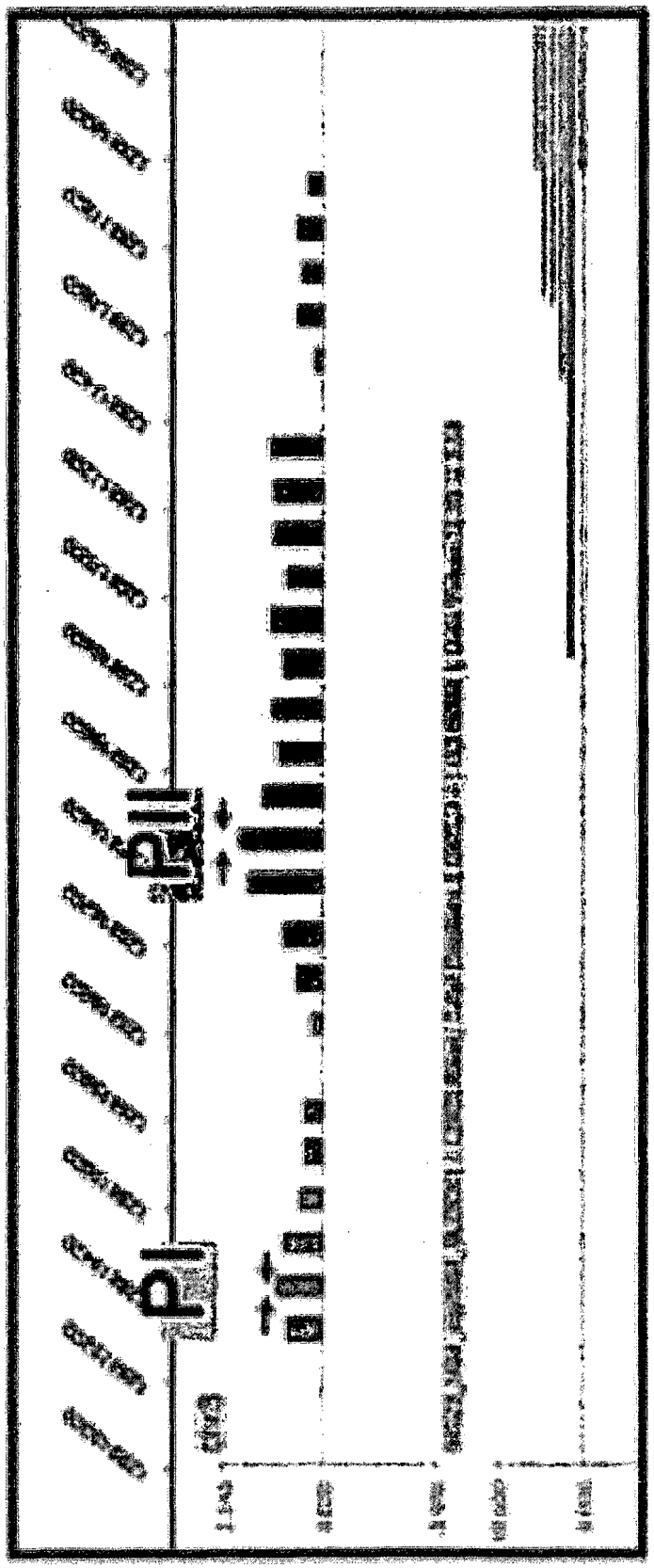
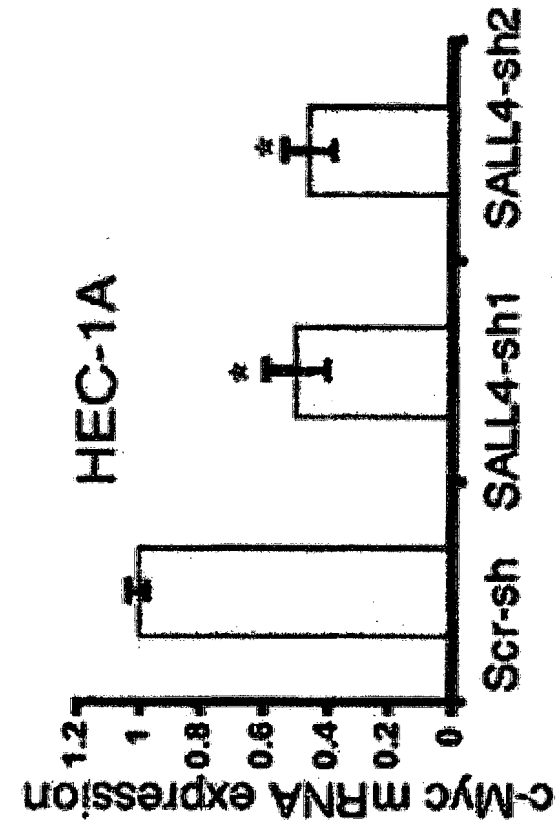


Figure 44


HEC-1A
c-Myc mRNA expression
1.2
1
0.8
0.6
0.4
0.2
0
Scr-sh
SALL4-sh1
SALL4-sh2
*
*

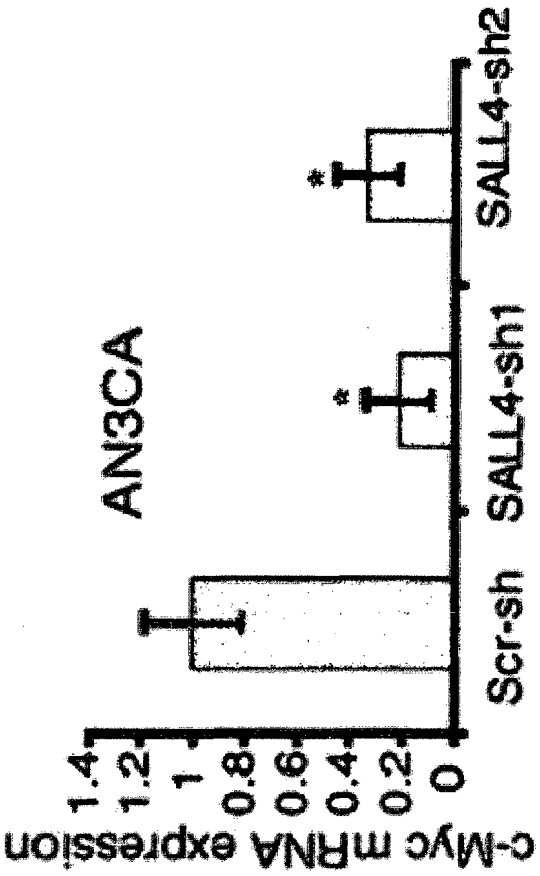
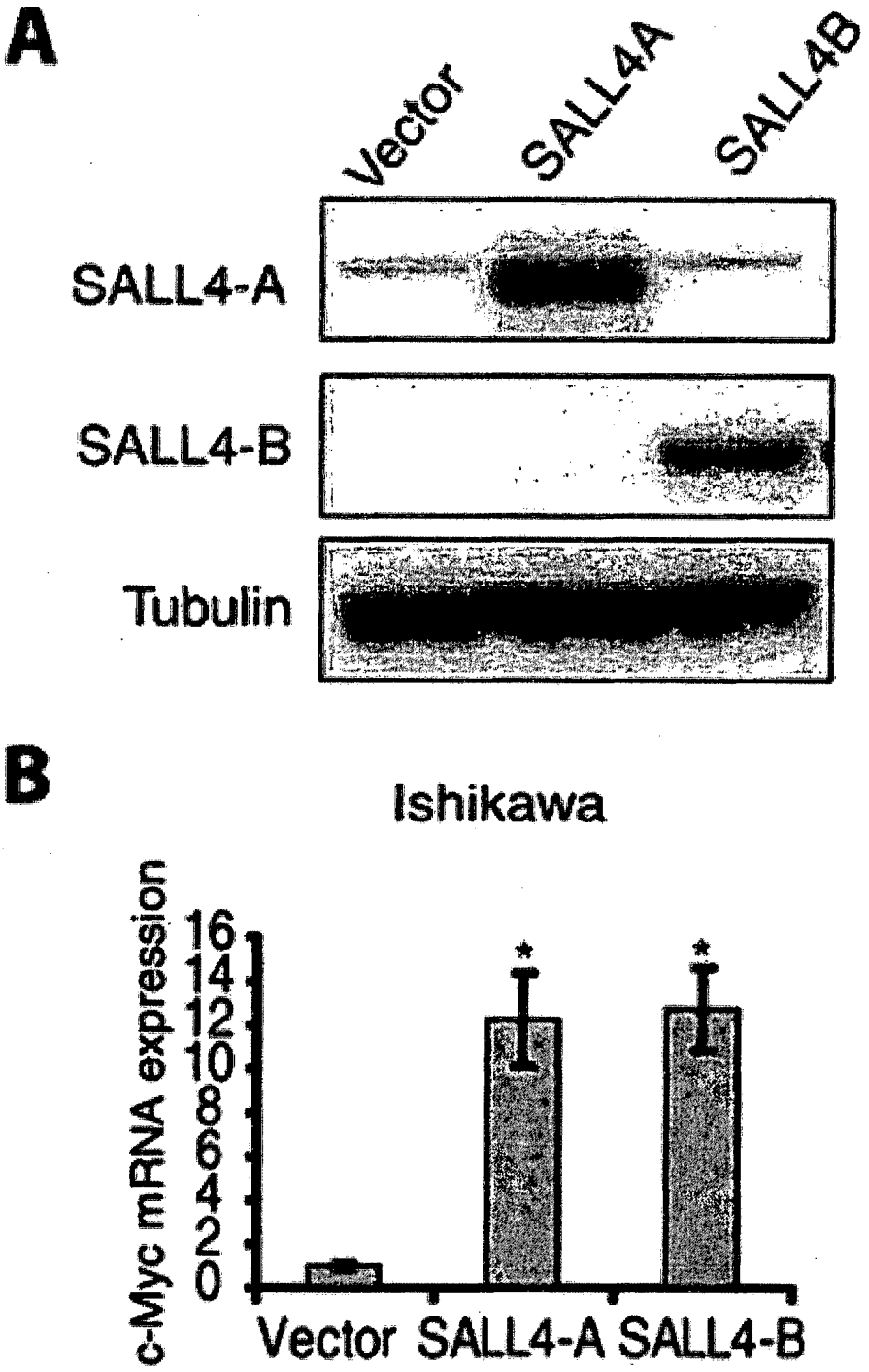

AN3CA
c-Myc mRNA expression
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Scr-sh
SALL4-sh1
SALL4-sh2
*
*

Figure 45

Figures 46A-46B



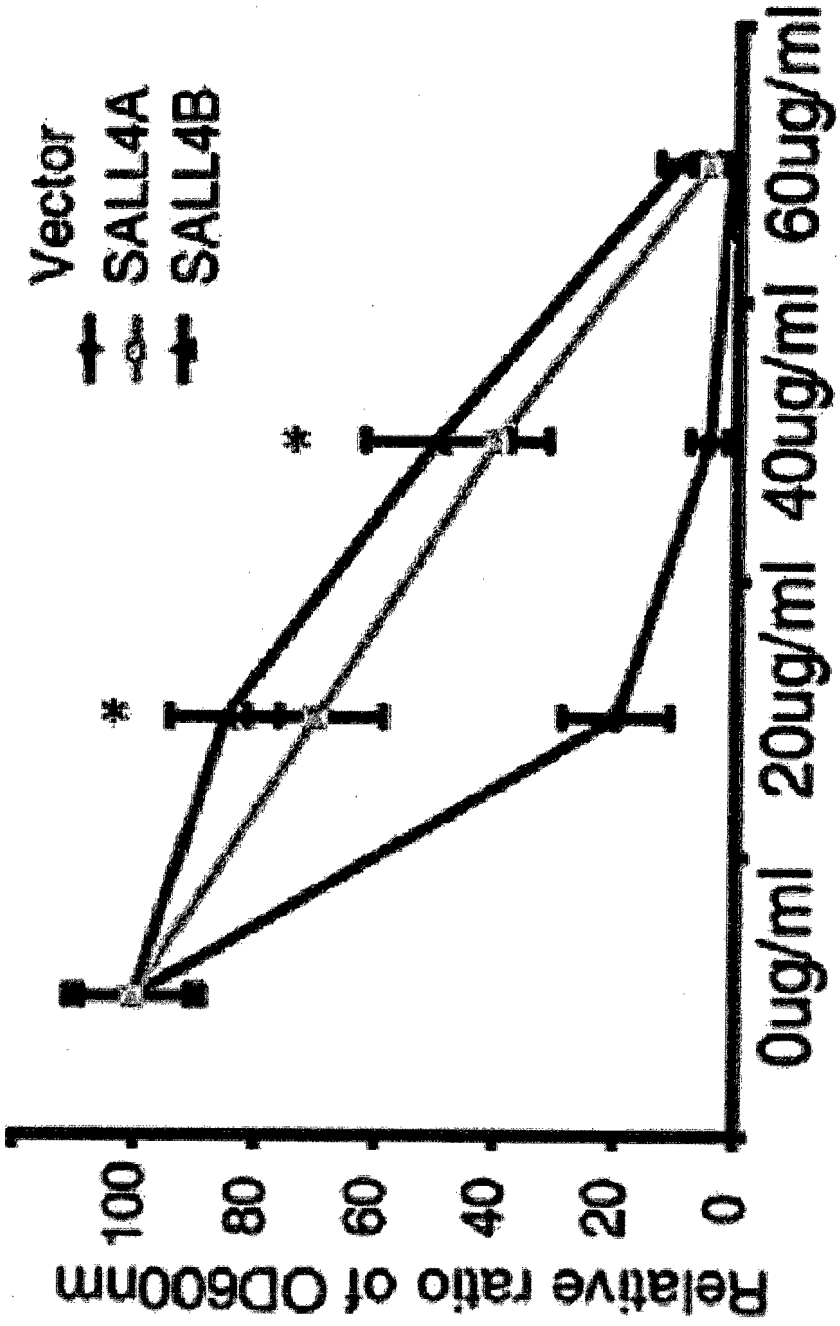
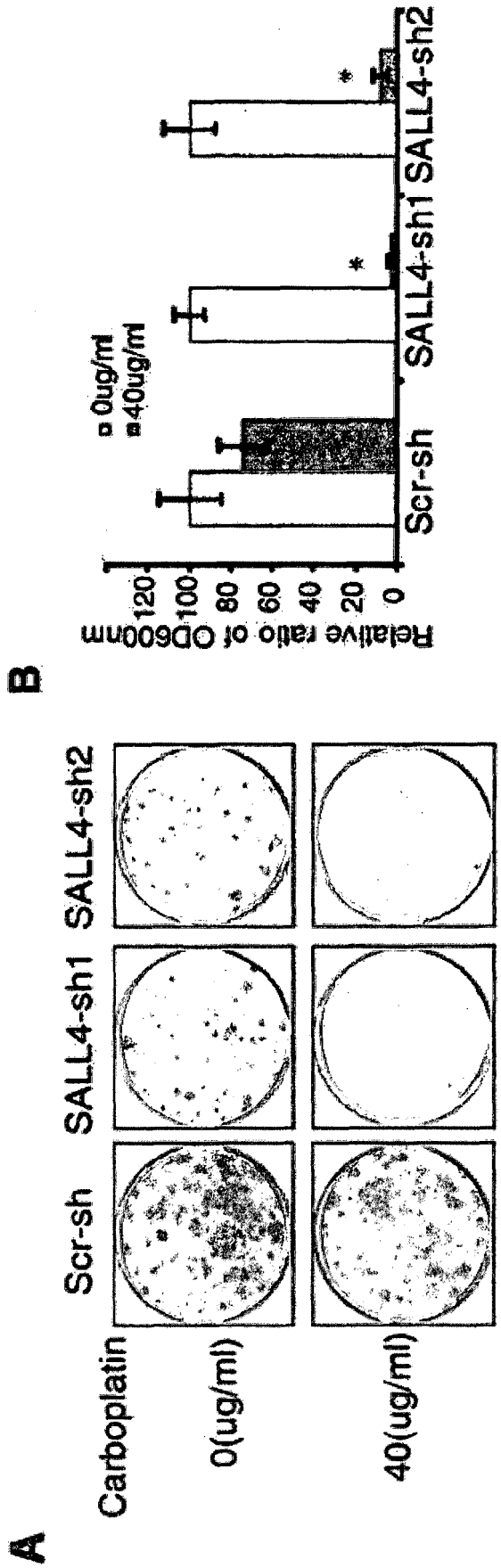

Relative ratio of OD600nm
100
80
60
40
20
0
0ug/ml
20ug/ml
40ug/ml
60ug/ml
Vector
SALL4A
SALL4B
*
*

Figure 47



Figures 48A-48B

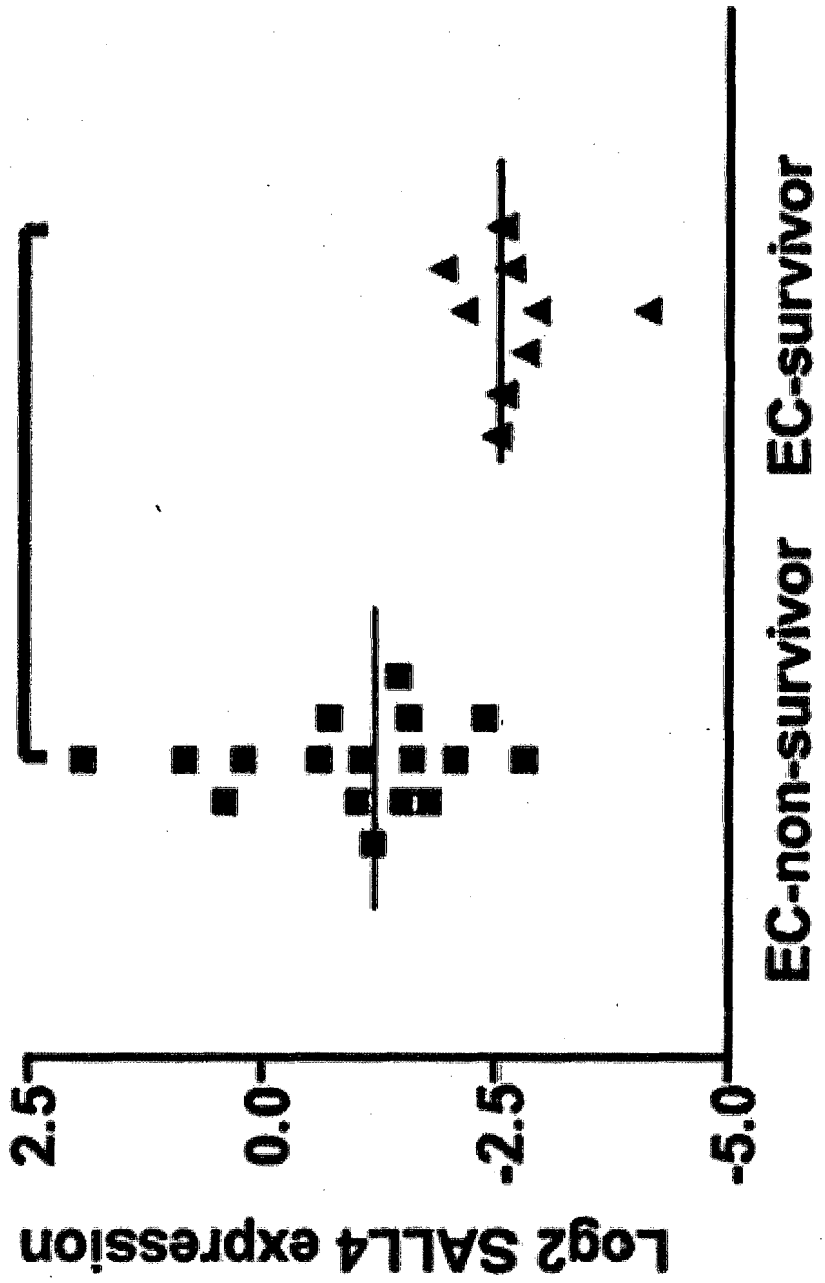

p=0.00008
2.5
0.0
-2.5
-5.0
Log2 SALL4 expression
EC-non-survivor
EC-survivor

Figure 49

Figure 50

Table S3. List of primers used in ChIP-qPCR

Primer	Sequence
cMyc-PI-f	AAGGAGGGTGGCTGGAAACTT
cMyc-PI-r	CGTTCAGGTTTGCGAAAGTA
cMyc-PII-f	GGAAAGAGGACCTGGAAAGG
cMyc-PII-r	GGGACCGGACTTCCTAAAAG
Negative-f	AGCAGGTGGATCATGAGGTC
Negative-r	CTGGAGTGCAGTGGTGTGAT

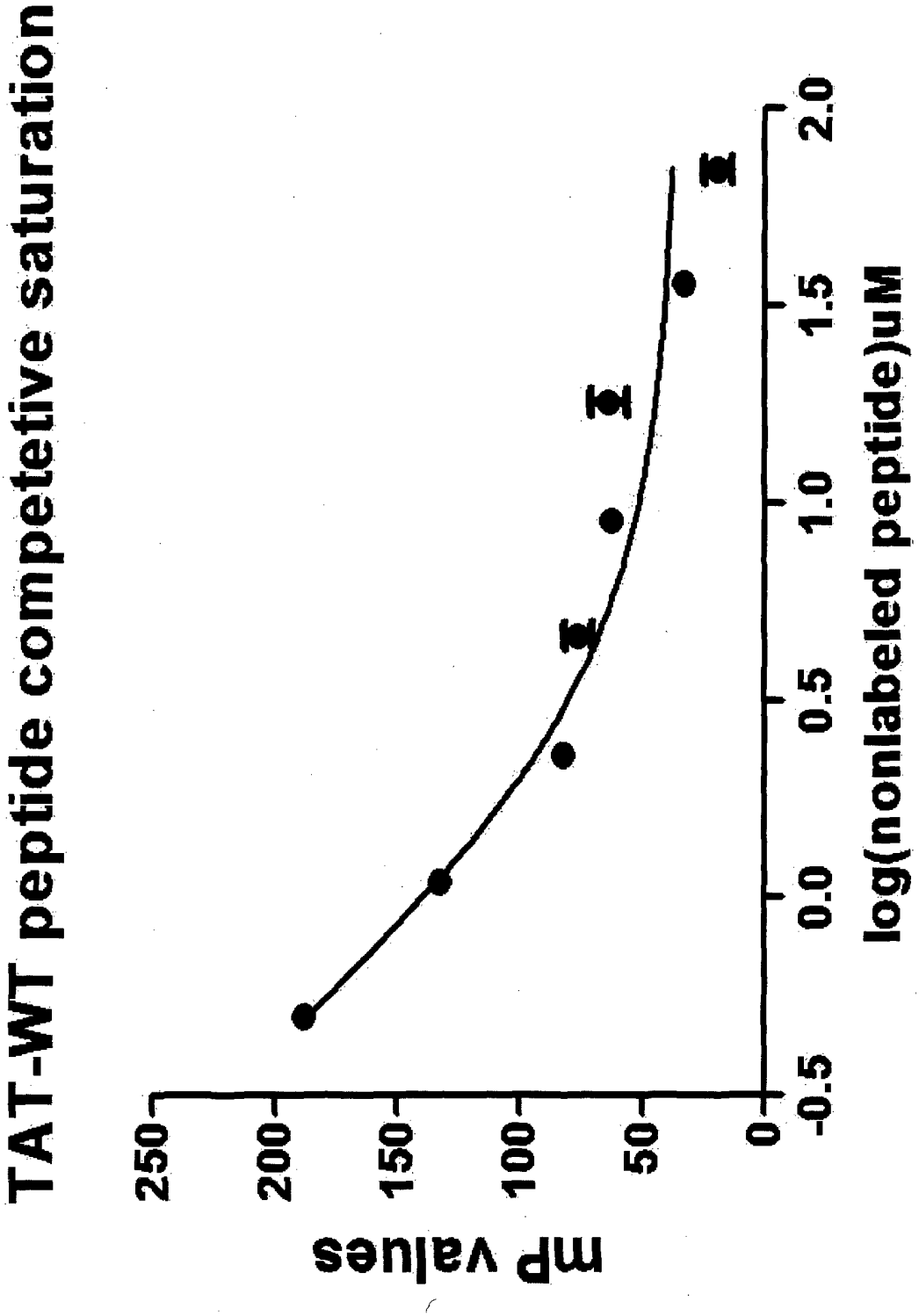

TAT-WT peptide competetive saturation
mP values
250
200
150
100
50
0
-0.5
0.0
0.5
1.0
1.5
2.0
log(nonlabeled peptide)uM

Figure 51

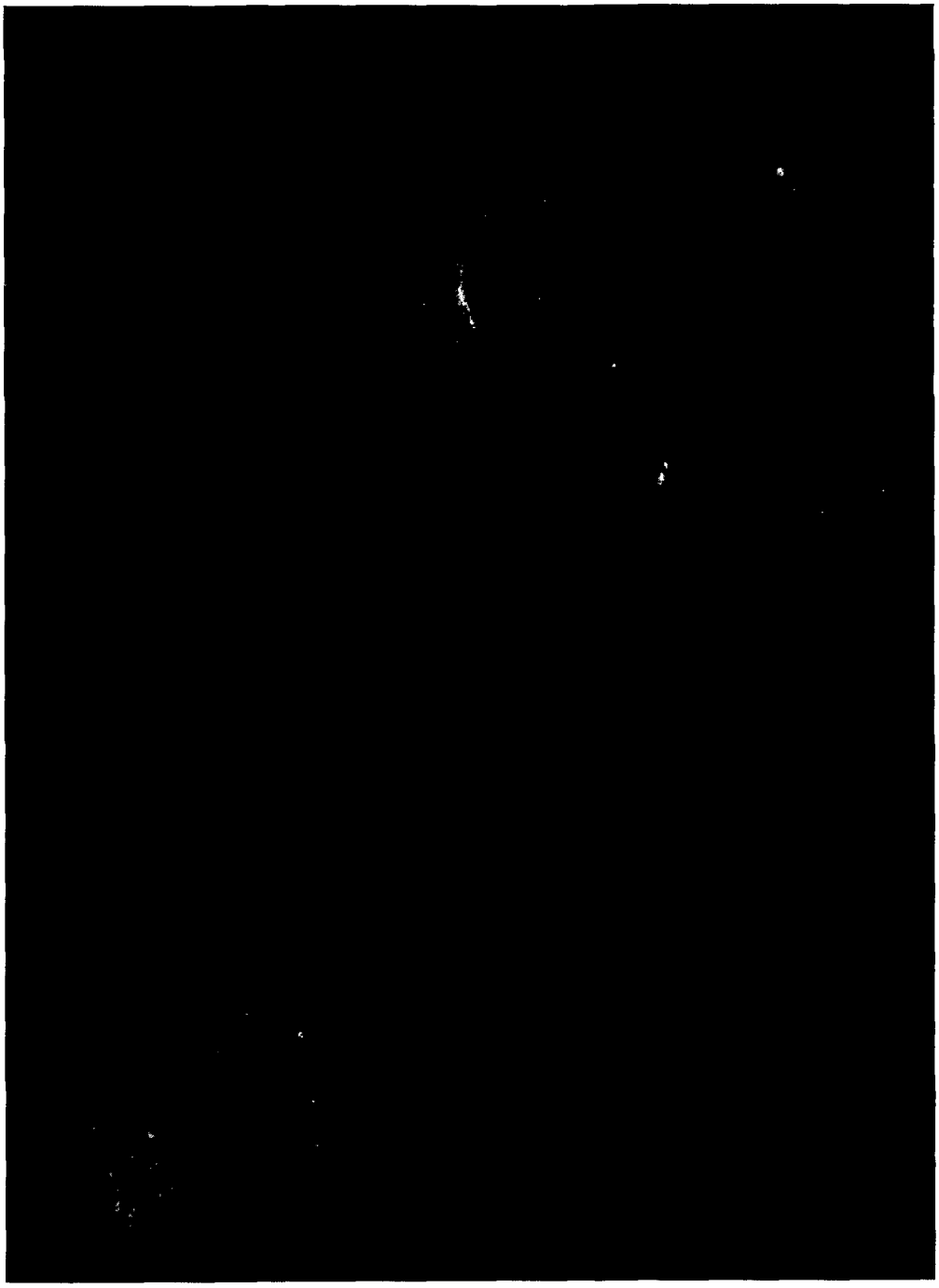


Figure 52

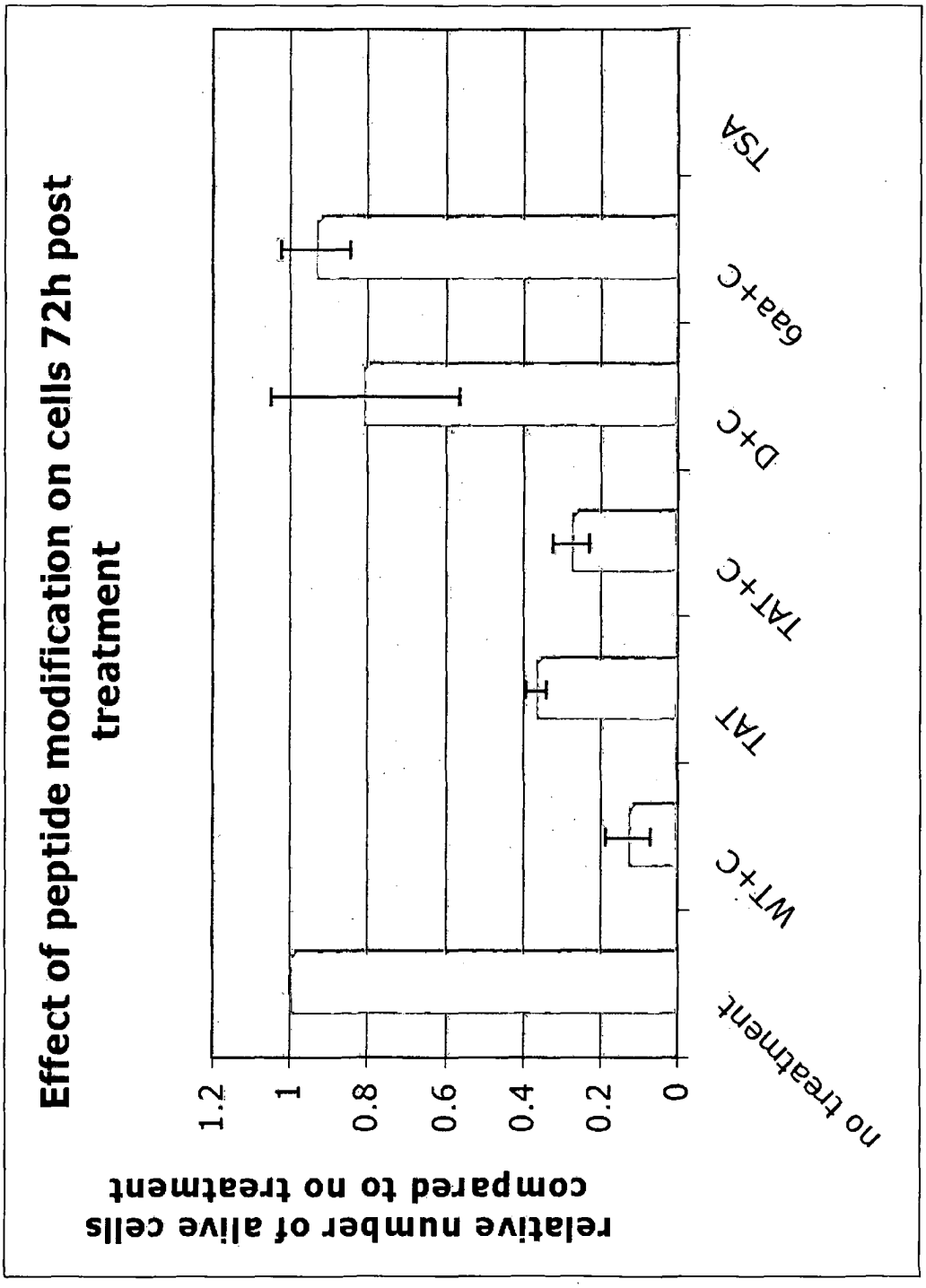
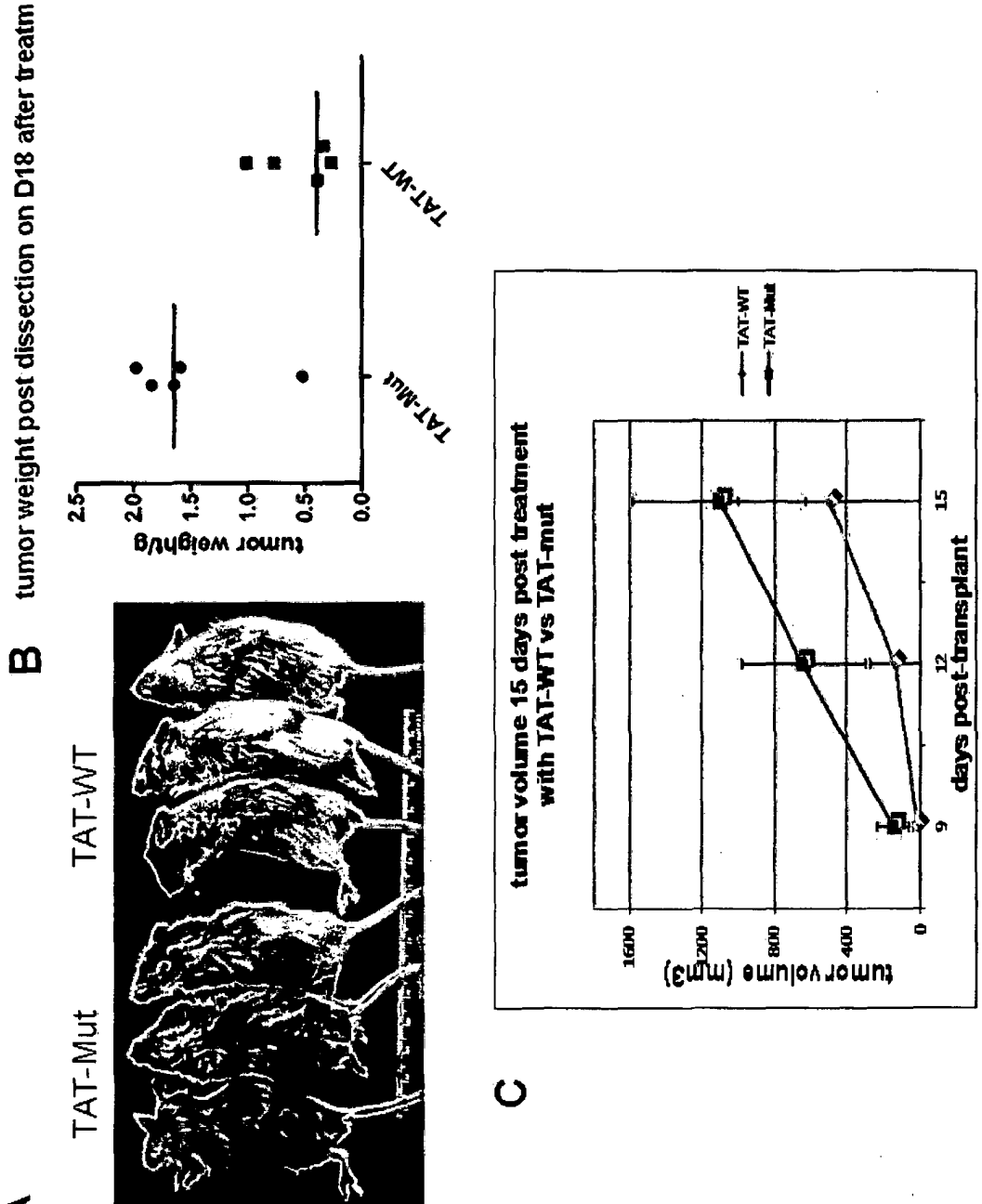
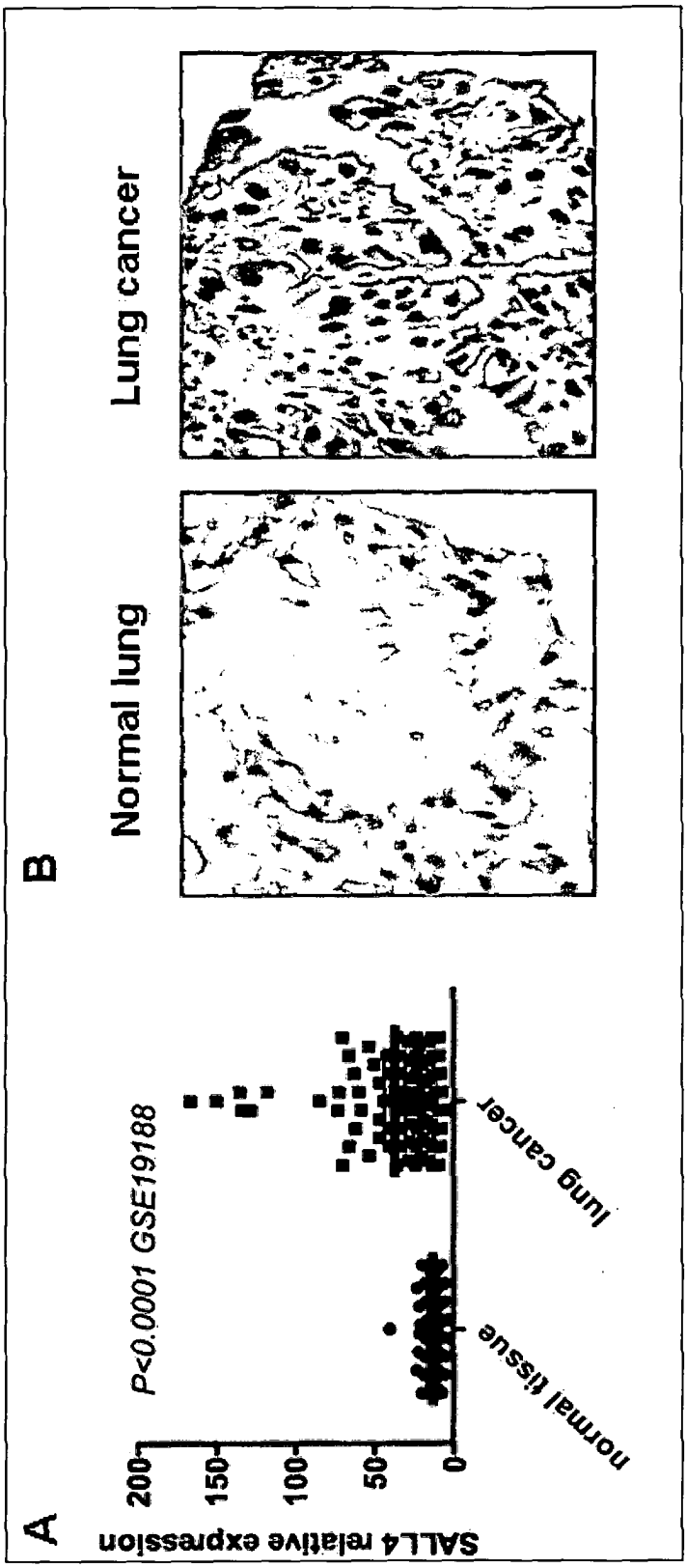

Effect of peptide modification on cells 72h post treatment
relative number of alive cells compared to no treatment
1.2
1
0.8
0.6
0.4
0.2
0
no treatment
WT+C
TAT
TAT+C
D+C
6aa+C
TSA

Figure 53

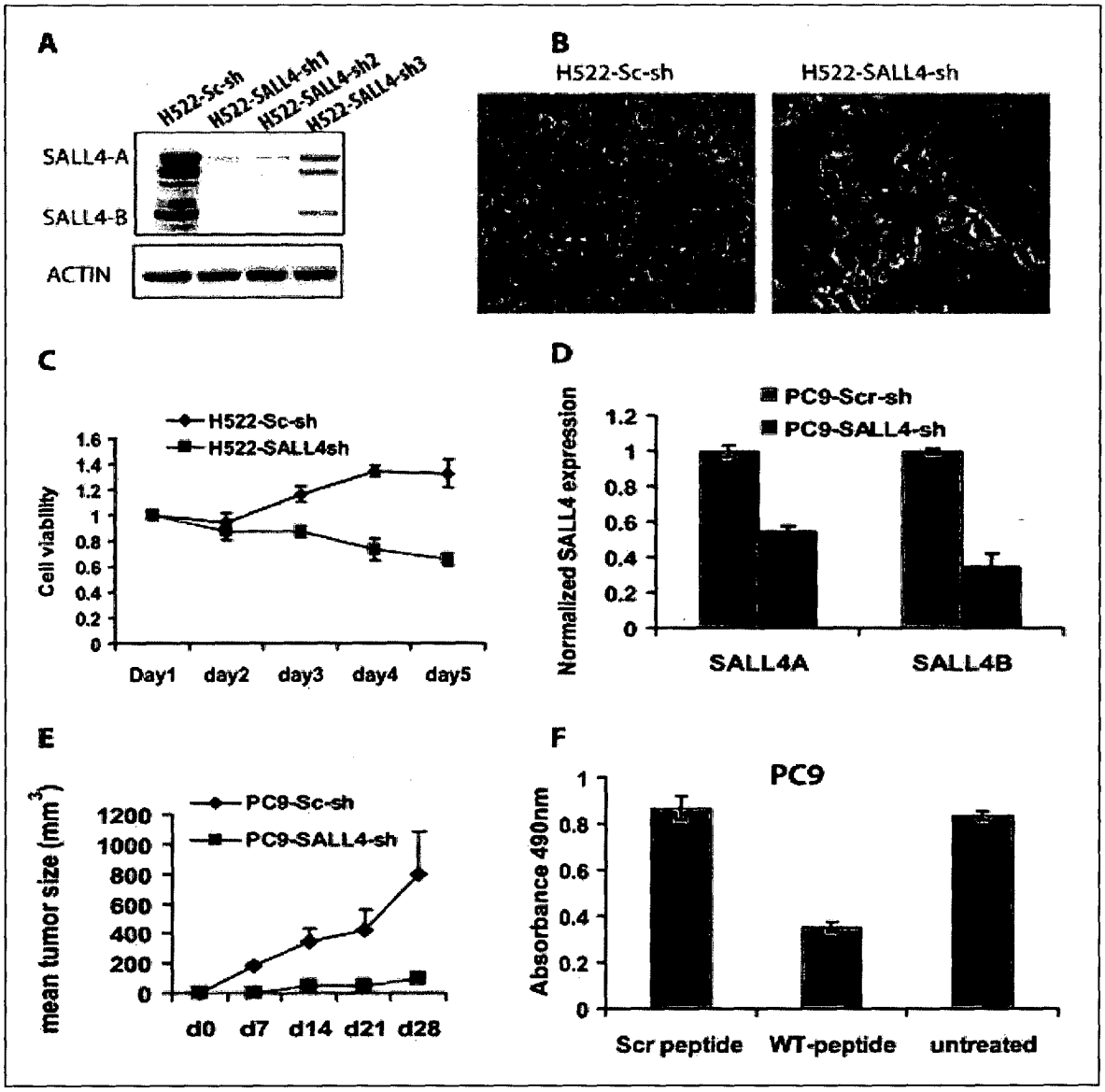
Figures 54A-54C

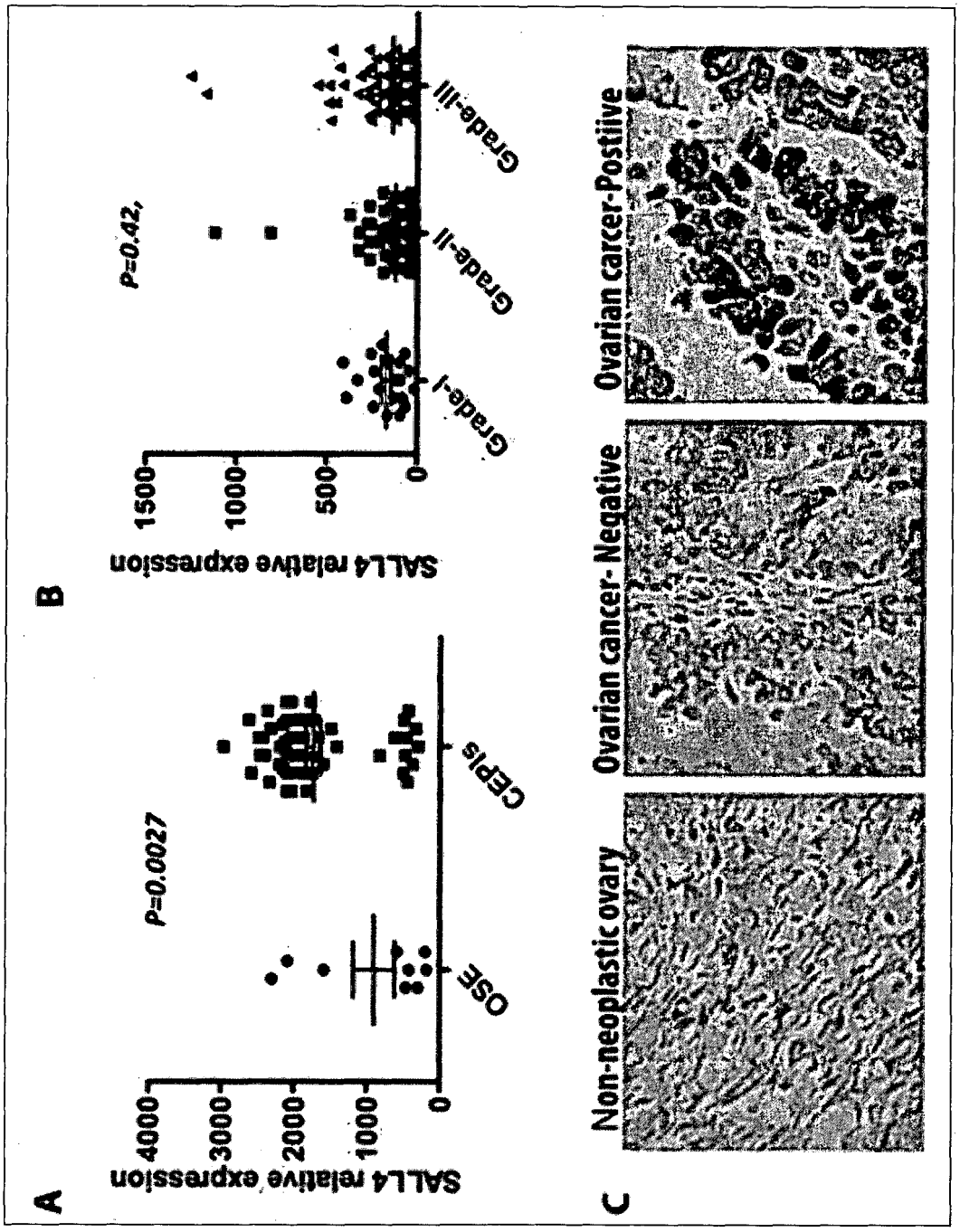




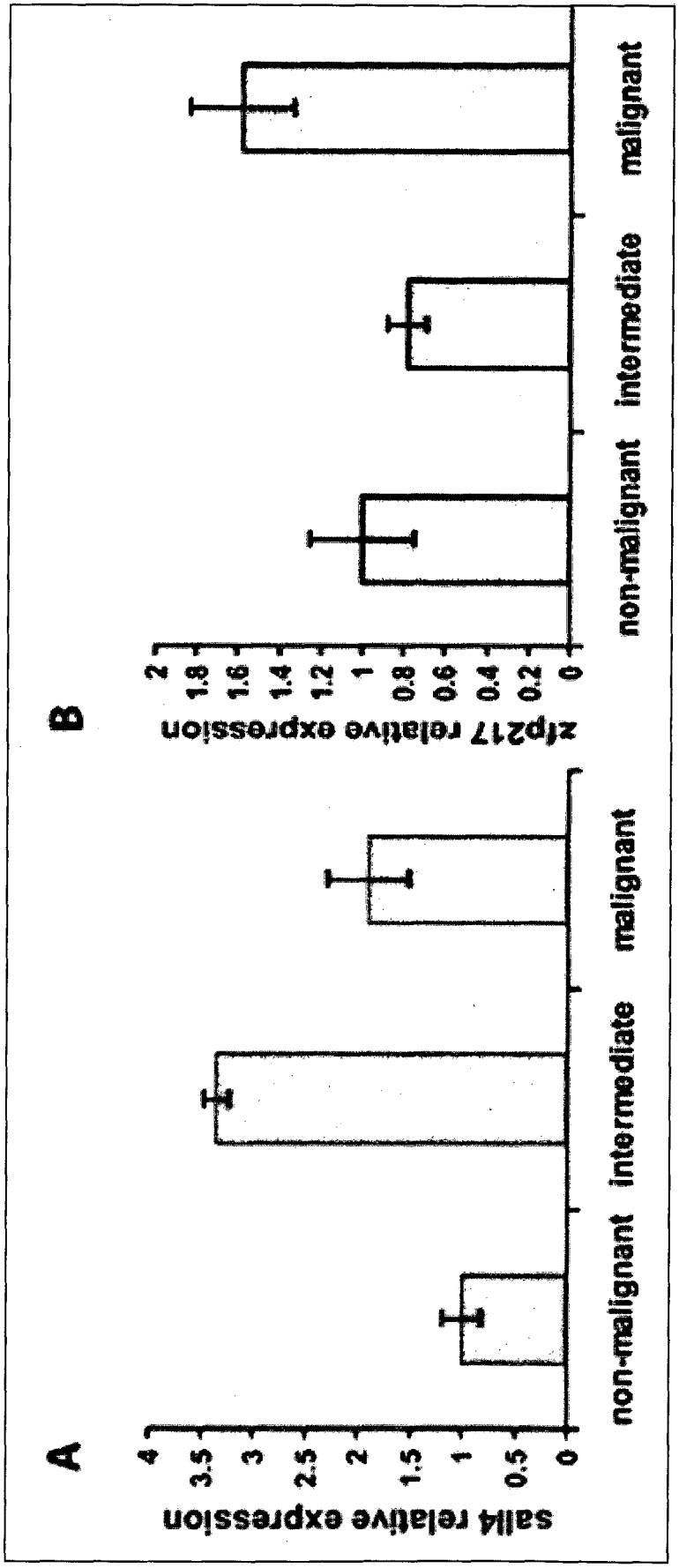
Figures 55A-55B

Figures 56A-56F

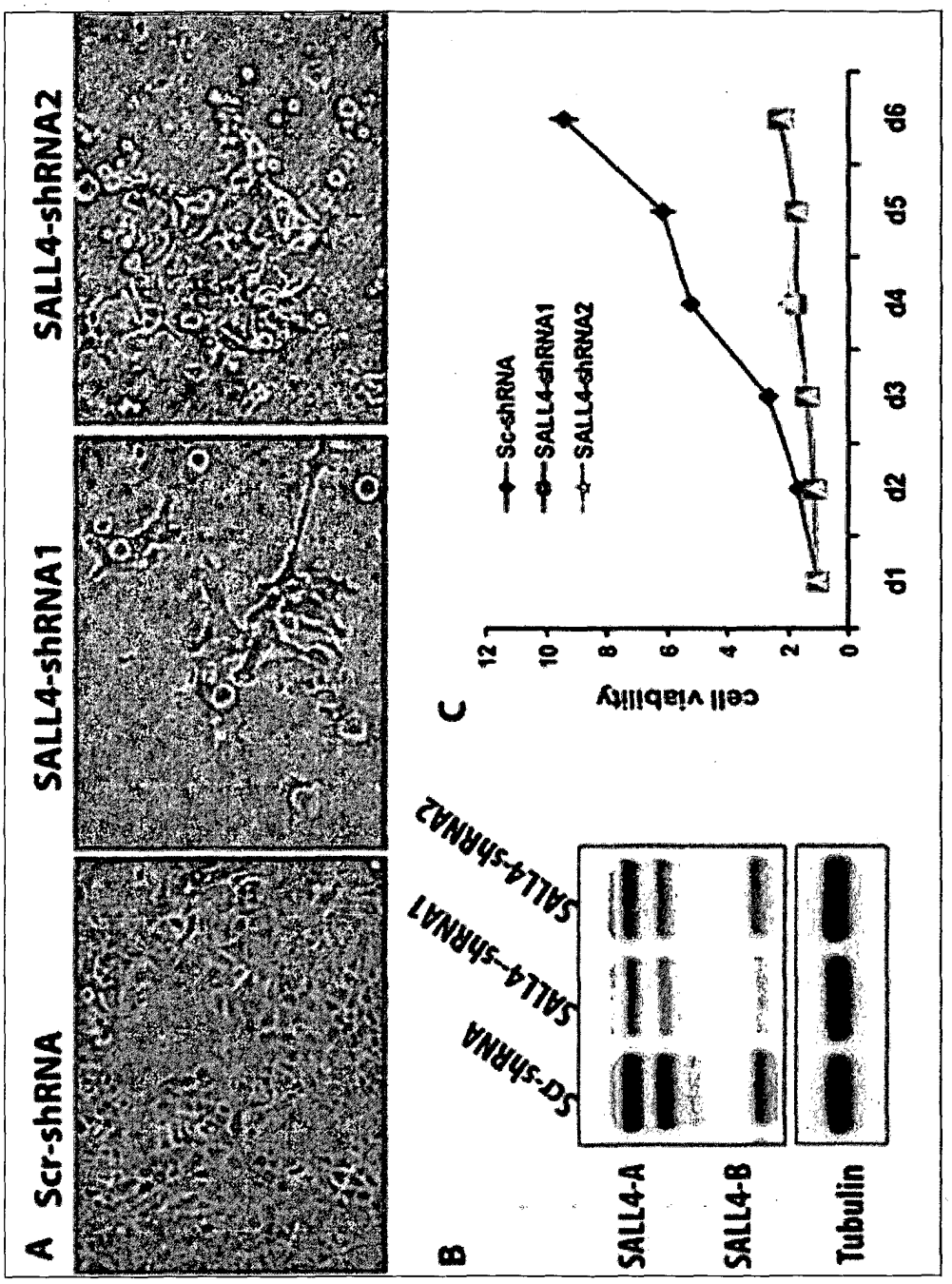




Figures 57A-57C



Figures 58A-58B



Figures 59A-59C

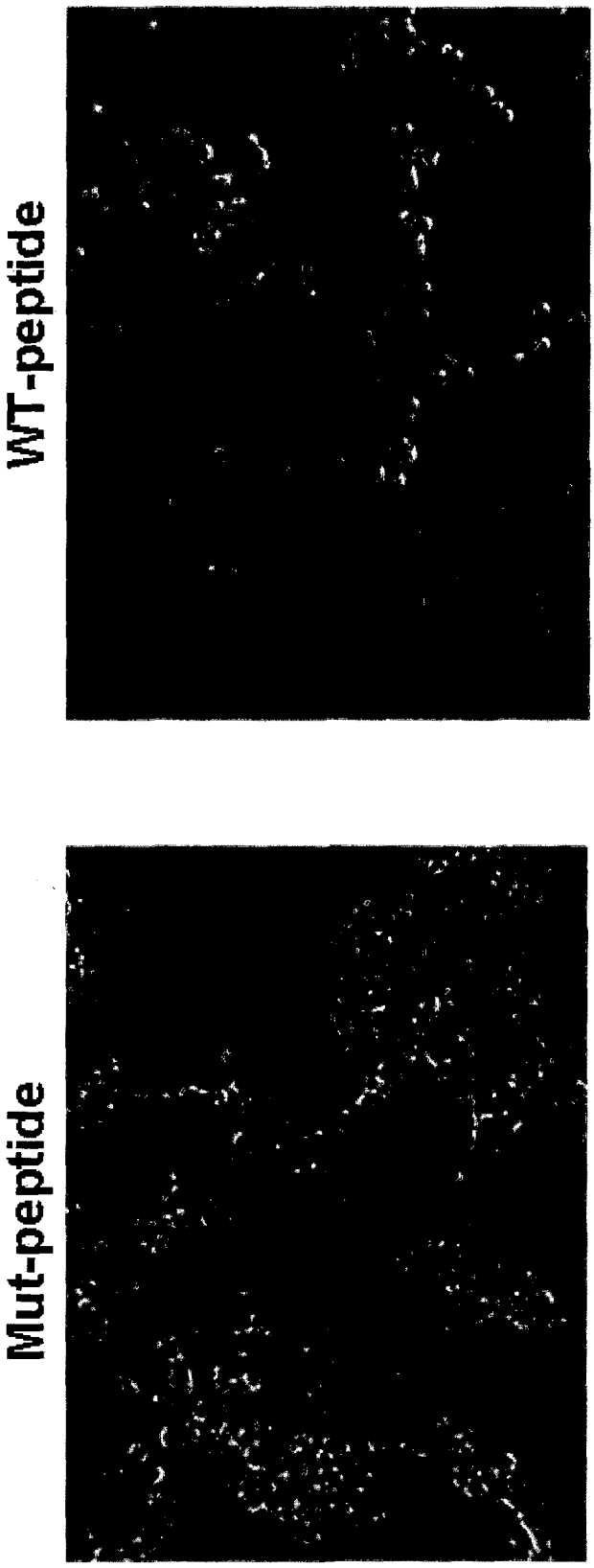
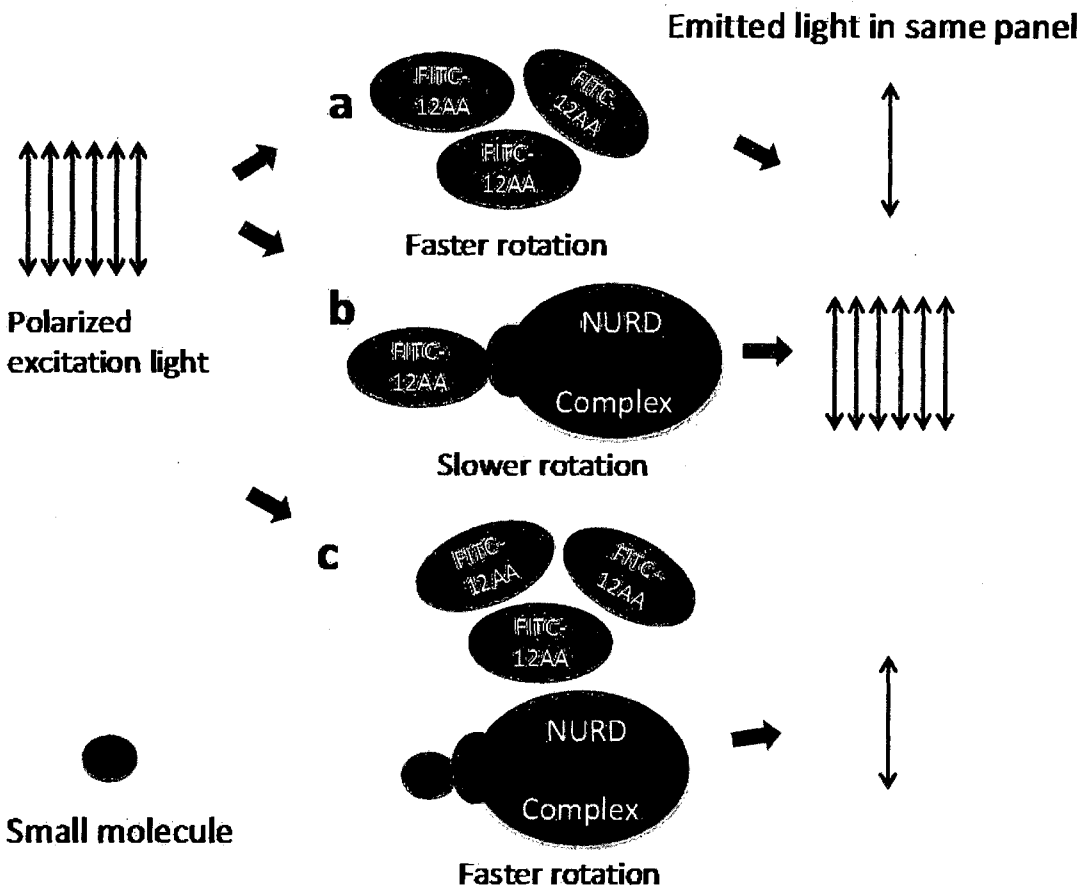


Figure 60

Figure 61


Emitted light in same panel
a
FITC-12AA
FITC-12AA
FITC-12AA
Faster rotation
Polarized excitation light
b
FITC-12AA
NURD Complex
Slower rotation
c
FITC-12AA
FITC-12AA
FITC-12AA
NURD Complex
Small molecule
Faster rotation