FIGURE 1

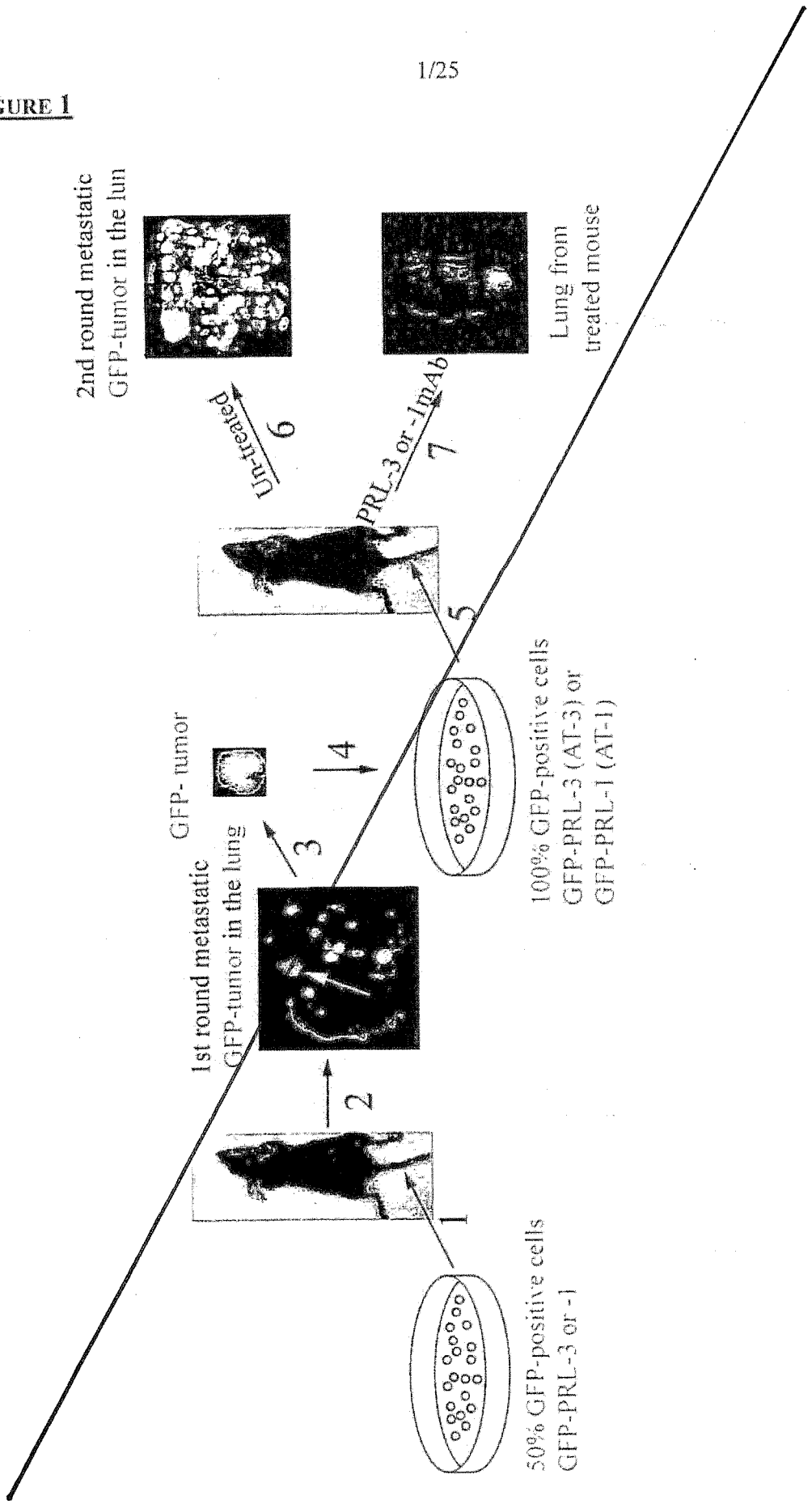

2nd round metastatic
GFP-tumor in the lun
Un-treated
6
PRL-3 or -1mAb
7
Lung from
treated mouse
GFP- tumor
1st round metastatic
GFP-tumor in the lung
3
4
5
100% GFP-positive cells
GFP-PRL-3 (AT-3) or
GFP-PRL-1 (AT-1)
2
1
50% GFP-positive cells
GFP-PRL-3 or -1

FIGURE 2A

PRL-3 mAb blocks EGFP-PRL-3 metastatic lung tumors

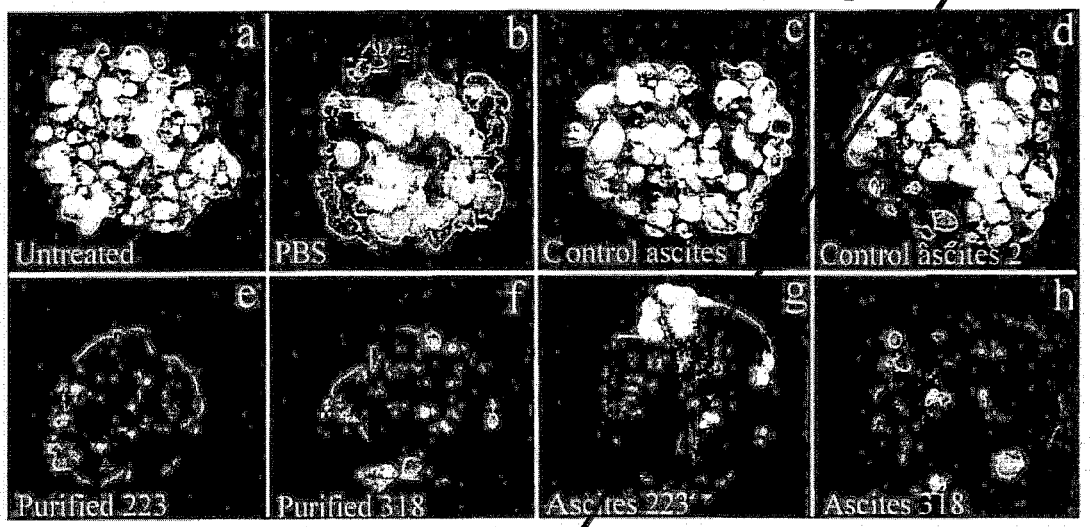


FIGURE 2B

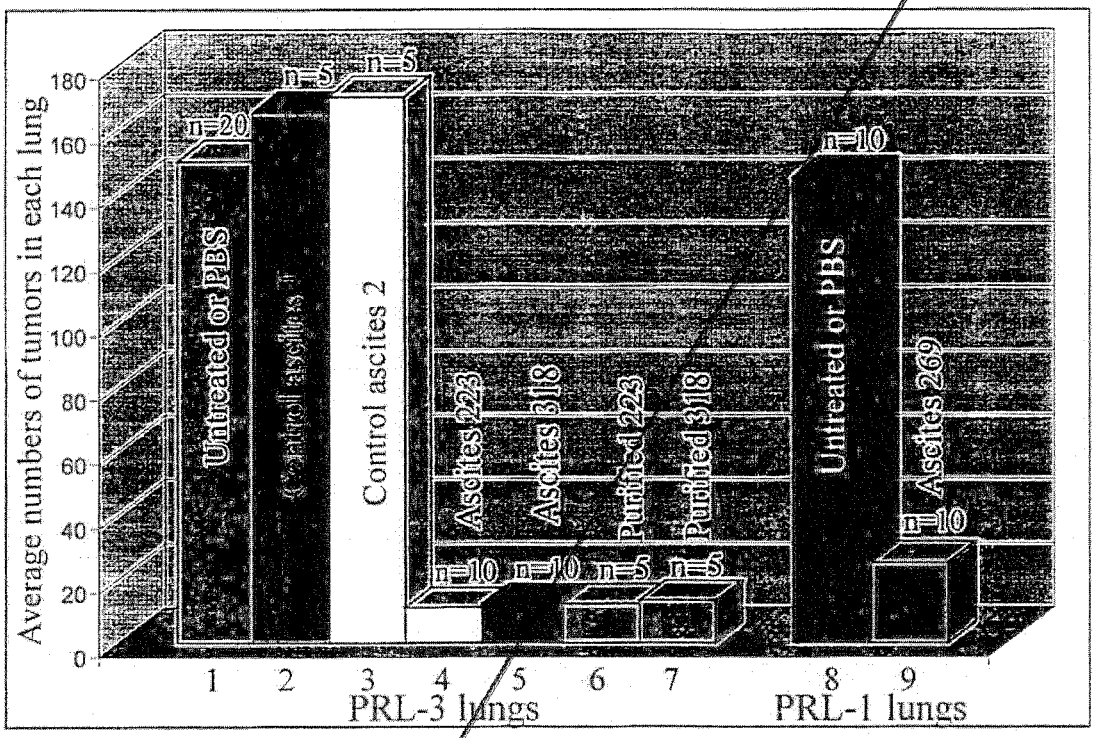

Average numbers of tumors in each lung
0
20
40
60
80
100
120
140
160
180
n=20
n=5
n=5
Untreated or PBS
Control ascites 2
Ascites 223
Ascites 318
Purified 223
Purified 318
n=10
n=10
n=5
n=5
n=10
Untreated or PBS
Ascites 269
n=10
1
2
3
4
5
6
7
8
9
PRL-3 lungs
PRL-1 lungs

FIGURE 3

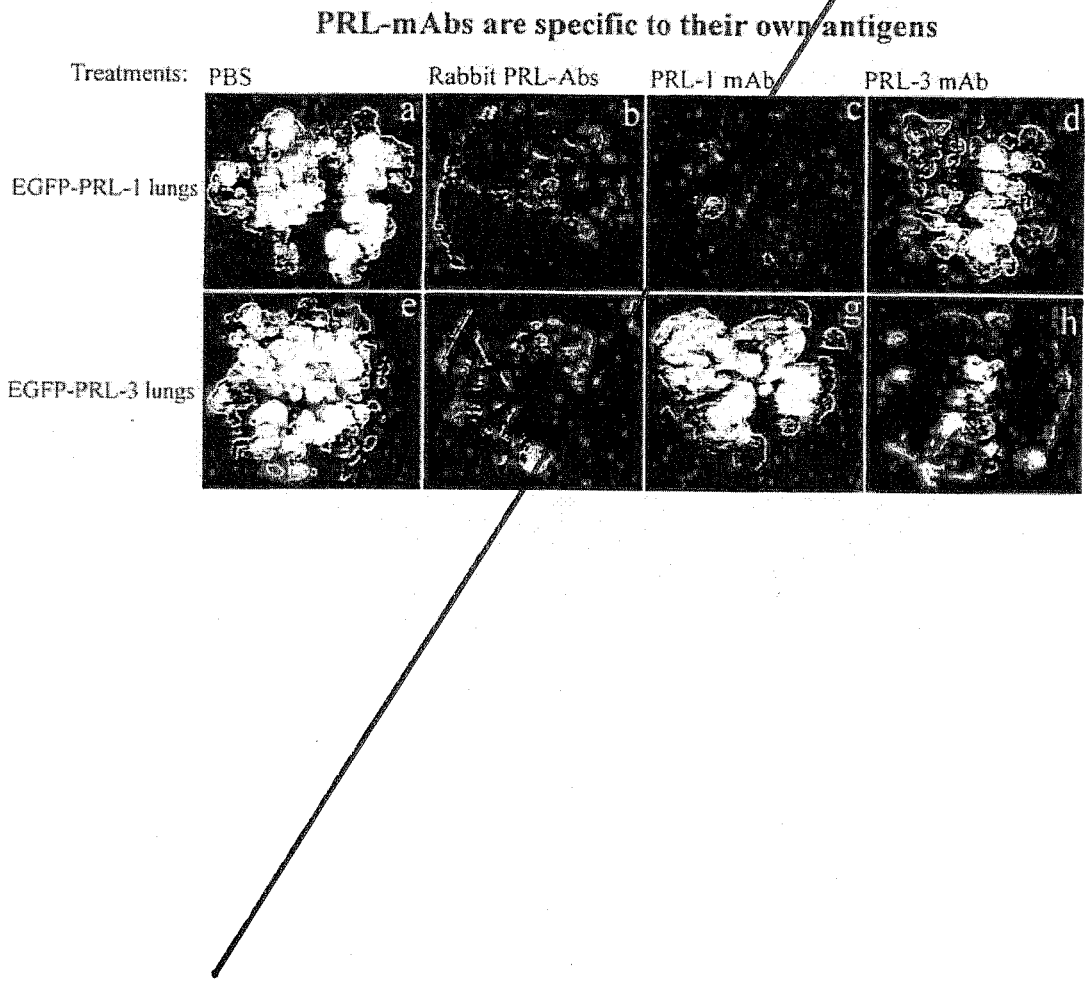

PRL-mAbs are specific to their own antigens
Treatments:
PBS
Rabbit PRL-Abs
PRL-1 mAb
PRL-3 mAb
EGFP-PRL-1 lungs
EGFP-PRL-3 lungs
a
b
c
d
e
g
h

FIGURE 4A

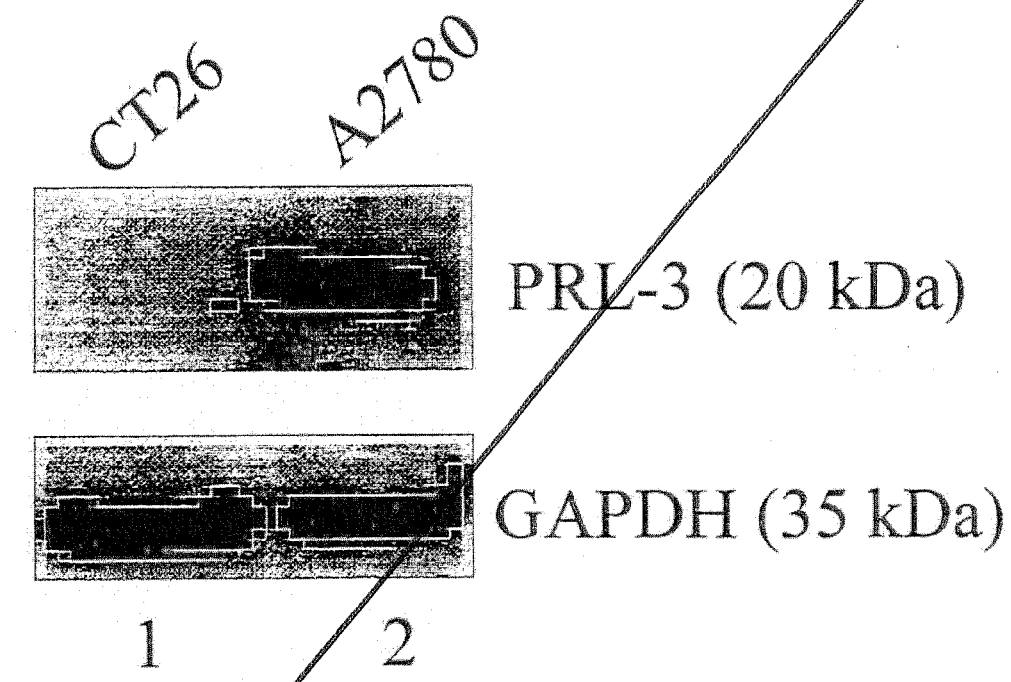
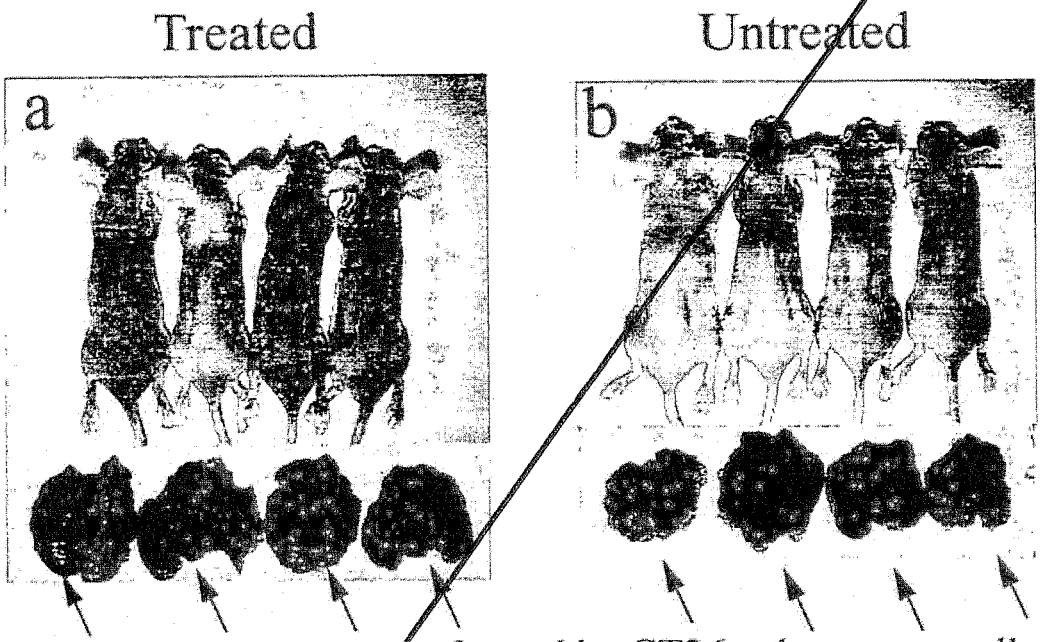
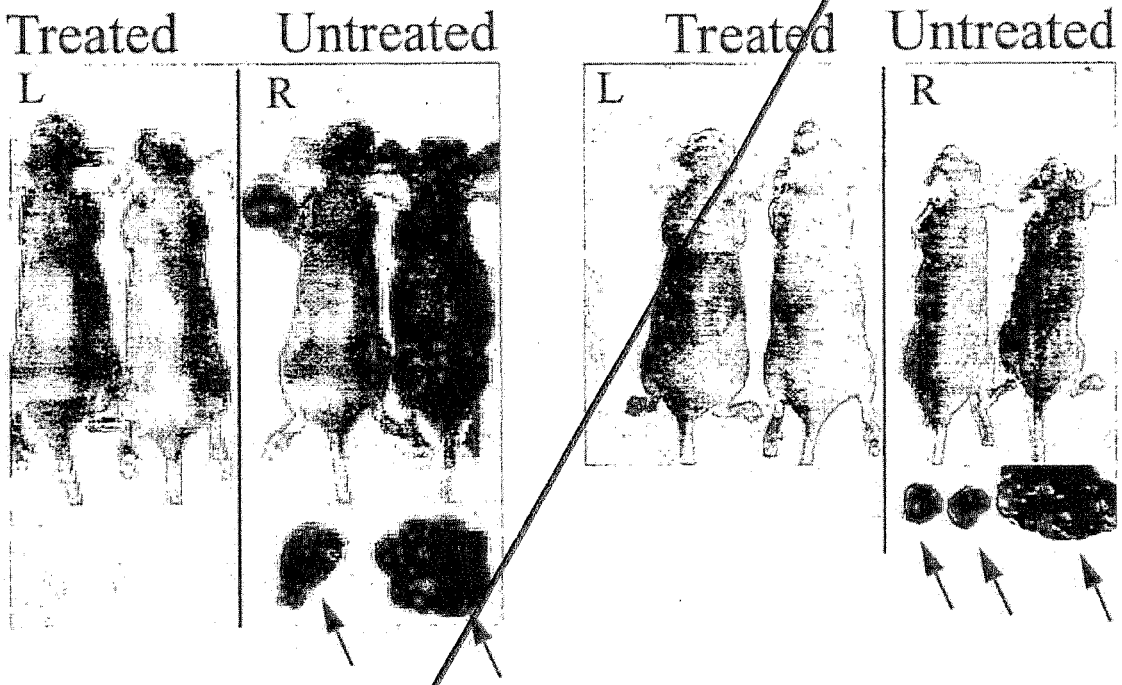


FIGURE 4B



Metastatic lung tumors formed by CT26 colon cancer cells

FIGURE 4C



Tumours formed by A2780 human ovarian cancer cells

FIGURE 5A

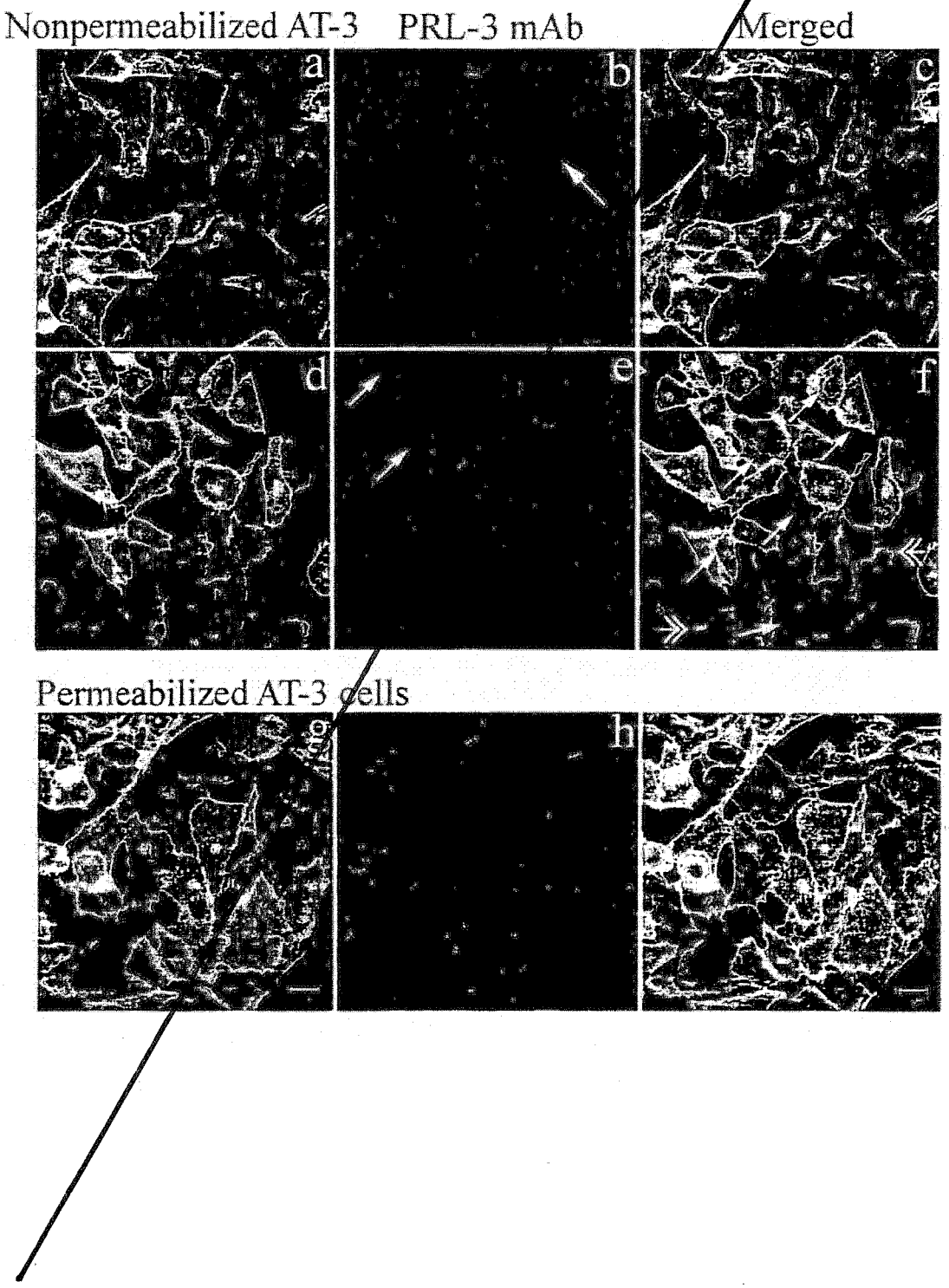

Nonpermeabilized AT-3
PRL-3 mAb
Merged
a
b
c
d
e
f
Permeabilized AT-3 cells
g
h

FIGURE 5B

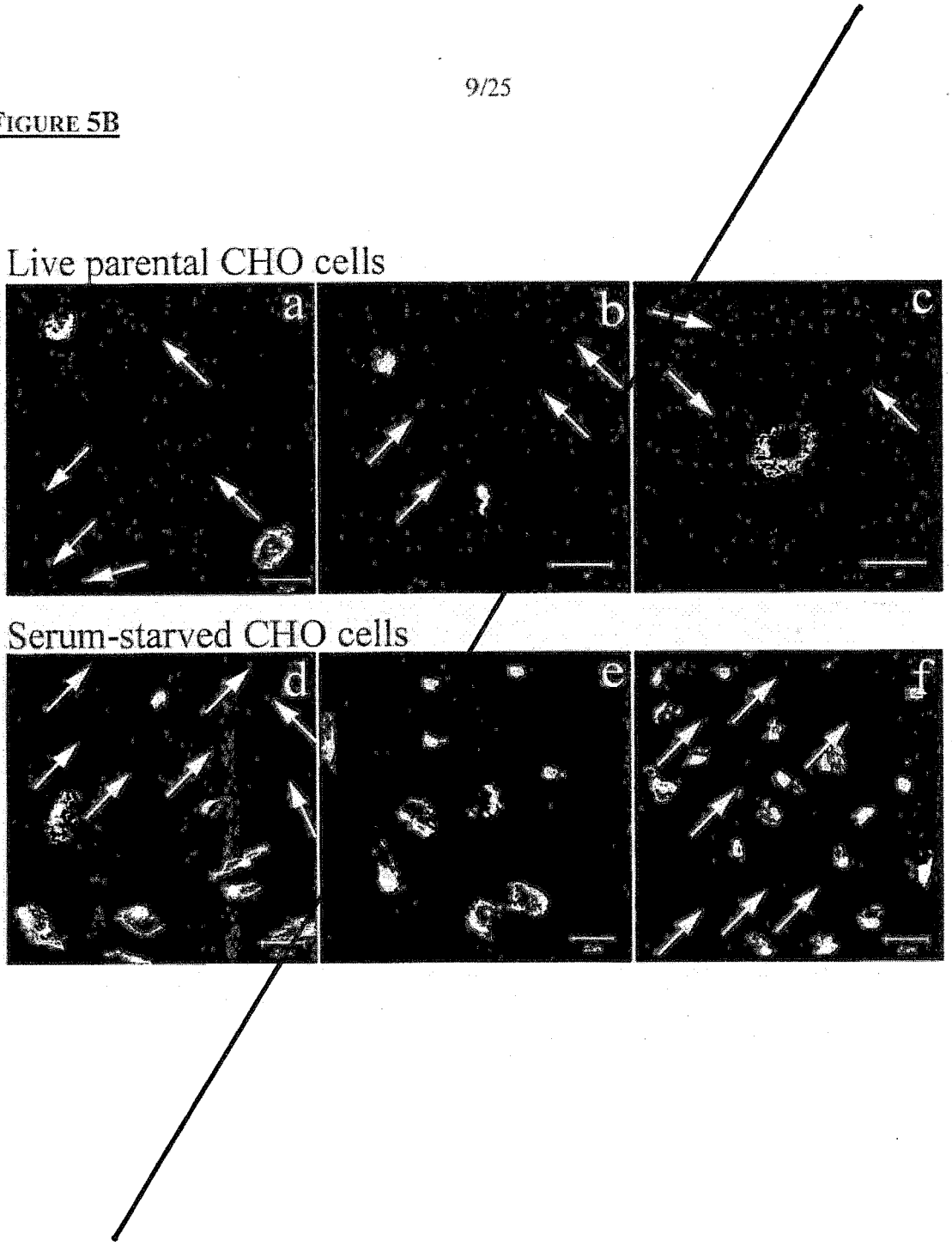


FIGURE 6

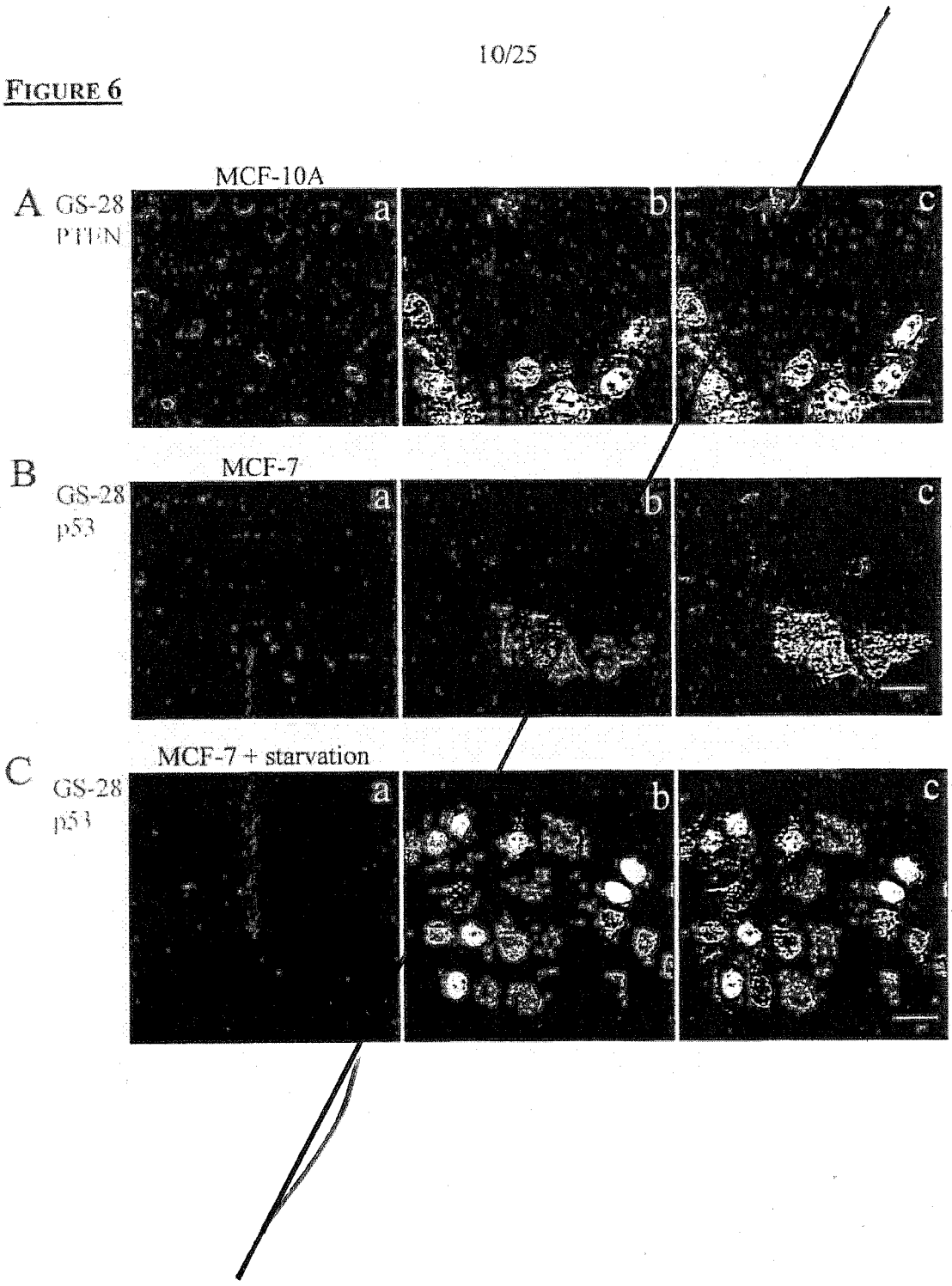

A
GS-28
PTEN
MCF-10A
a
b
c
B
GS-28
p53
MCF-7
a
b
c
C
GS-28
p53
MCF-7 + starvation
a
b
c

FIGURE 7

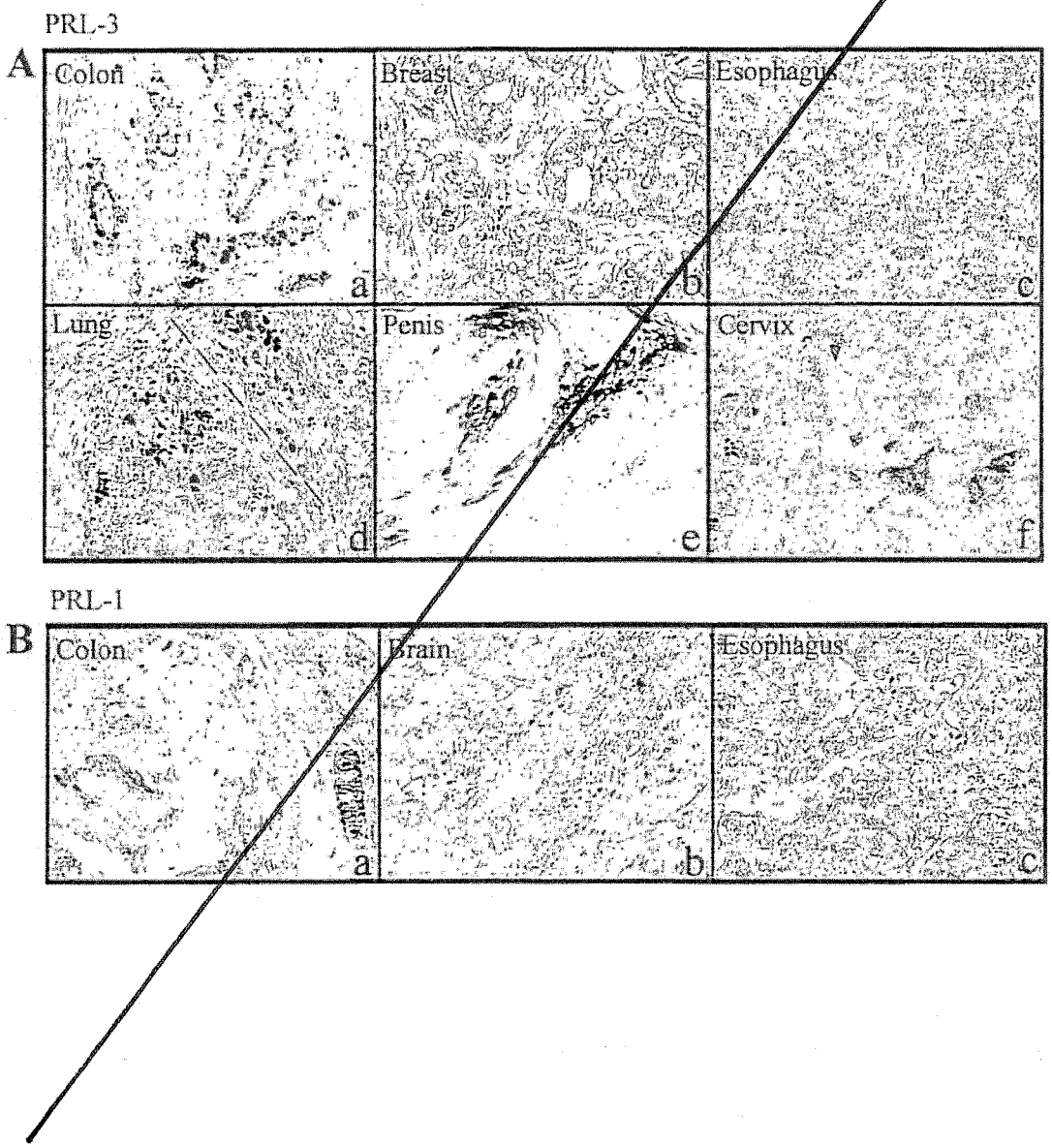

PRL-3
A
Colon
a
Breast
b
Esophagus
c
Lung
d
Penis
e
Cervix
f
PRL-1
B
Colon
a
Brain
b
Esophagus
c

FIGURE 8A

PRL-3 mouse mAb
mouse variable regions
human constant domains
PRL-3 mouse/human chimeric mAb

FIGURE 8B

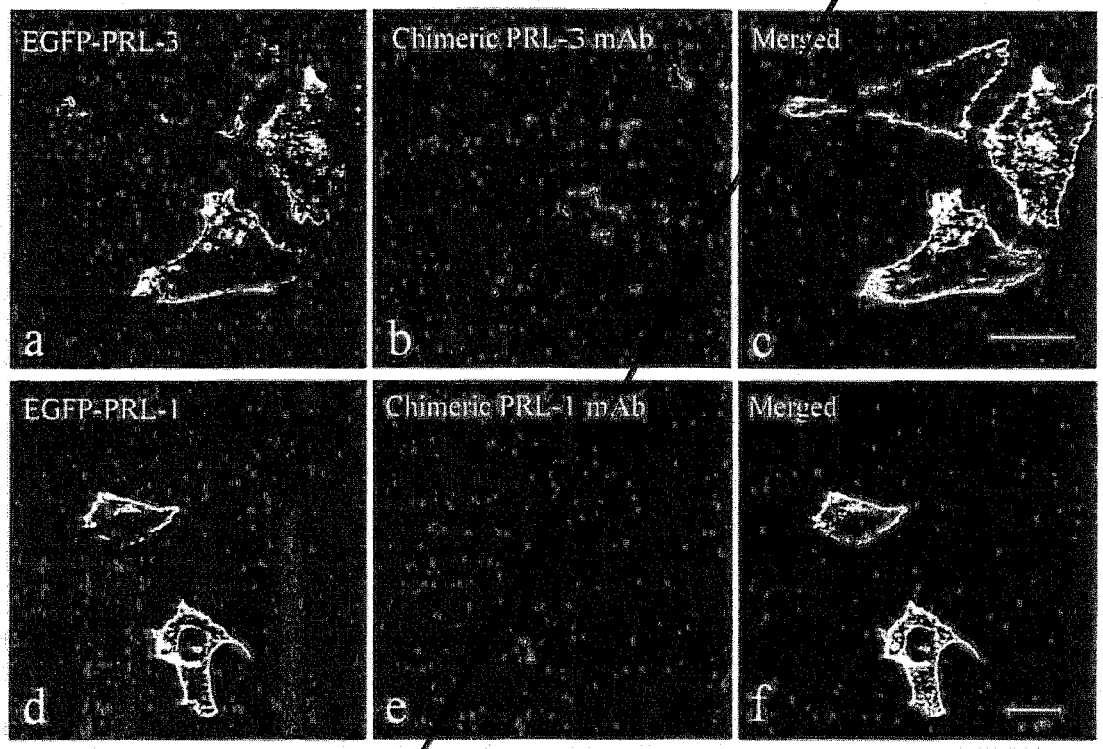

EGFP-PRL-3
Chimeric PRL-3 mAb
Merged
a
b
c
EGFP-PRL-1
Chimeric PRL-1 mAb
Merged
d
e
f

FIGURE 8C

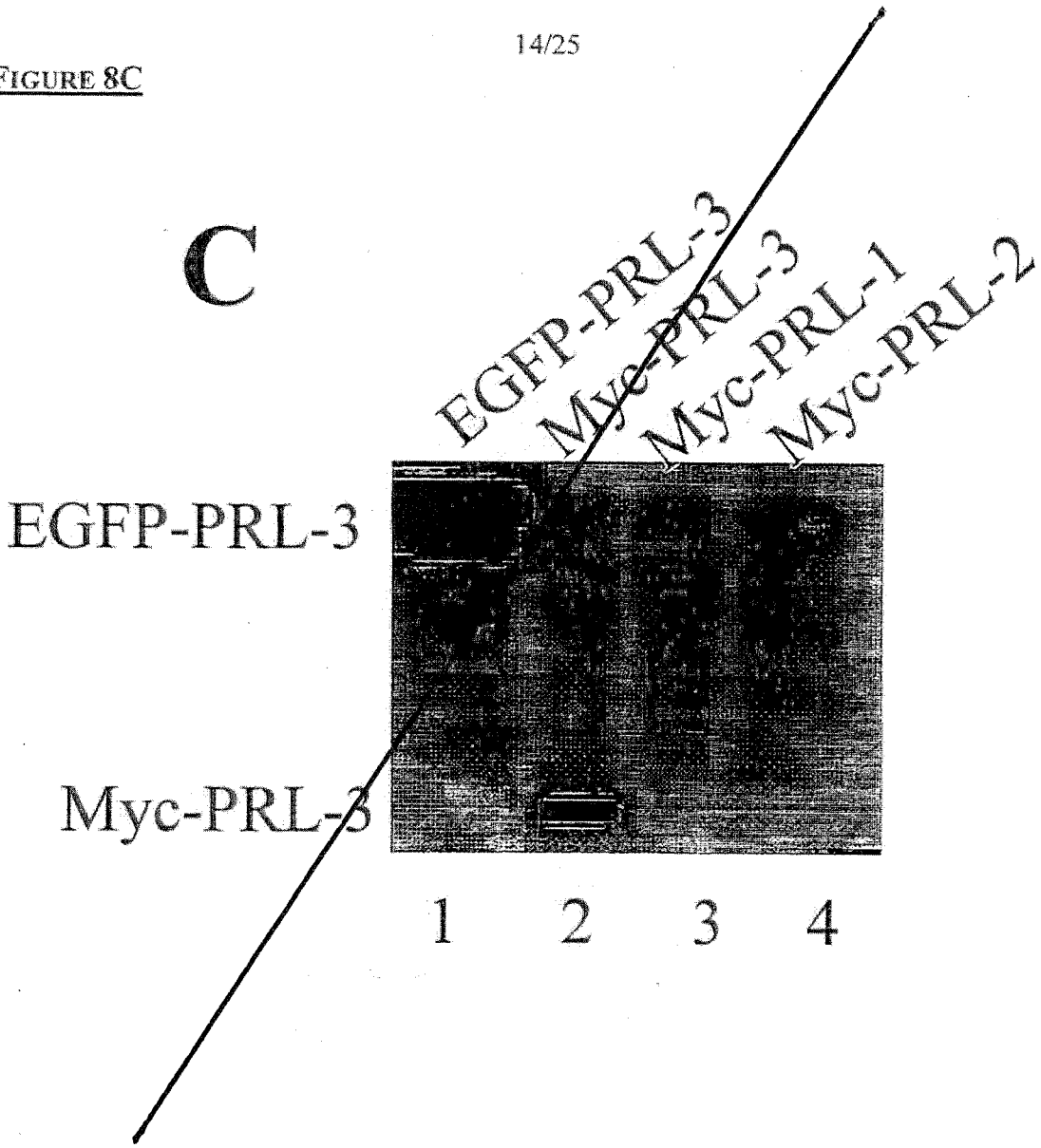


FIGURE 8D

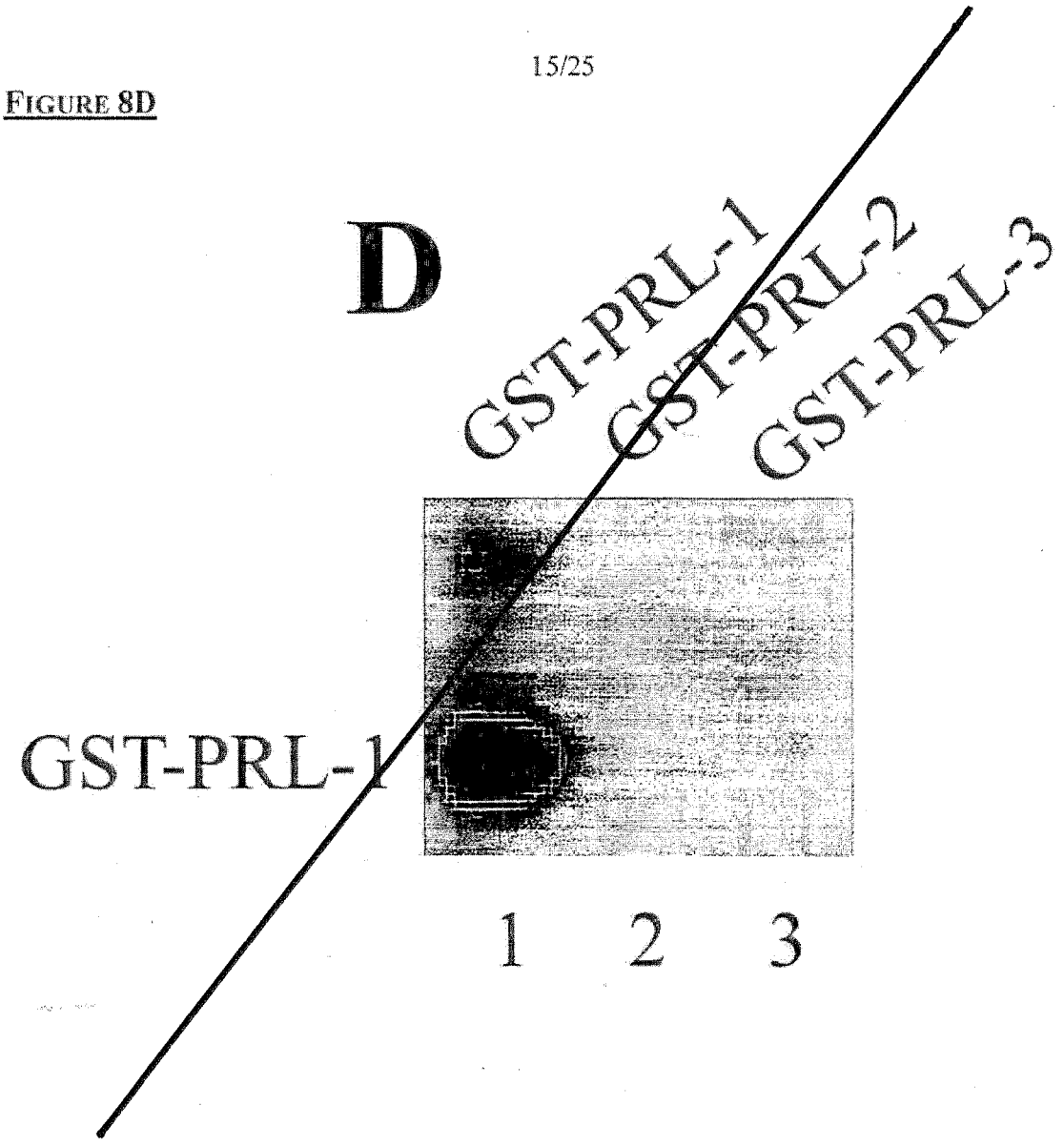


FIGURE 9A

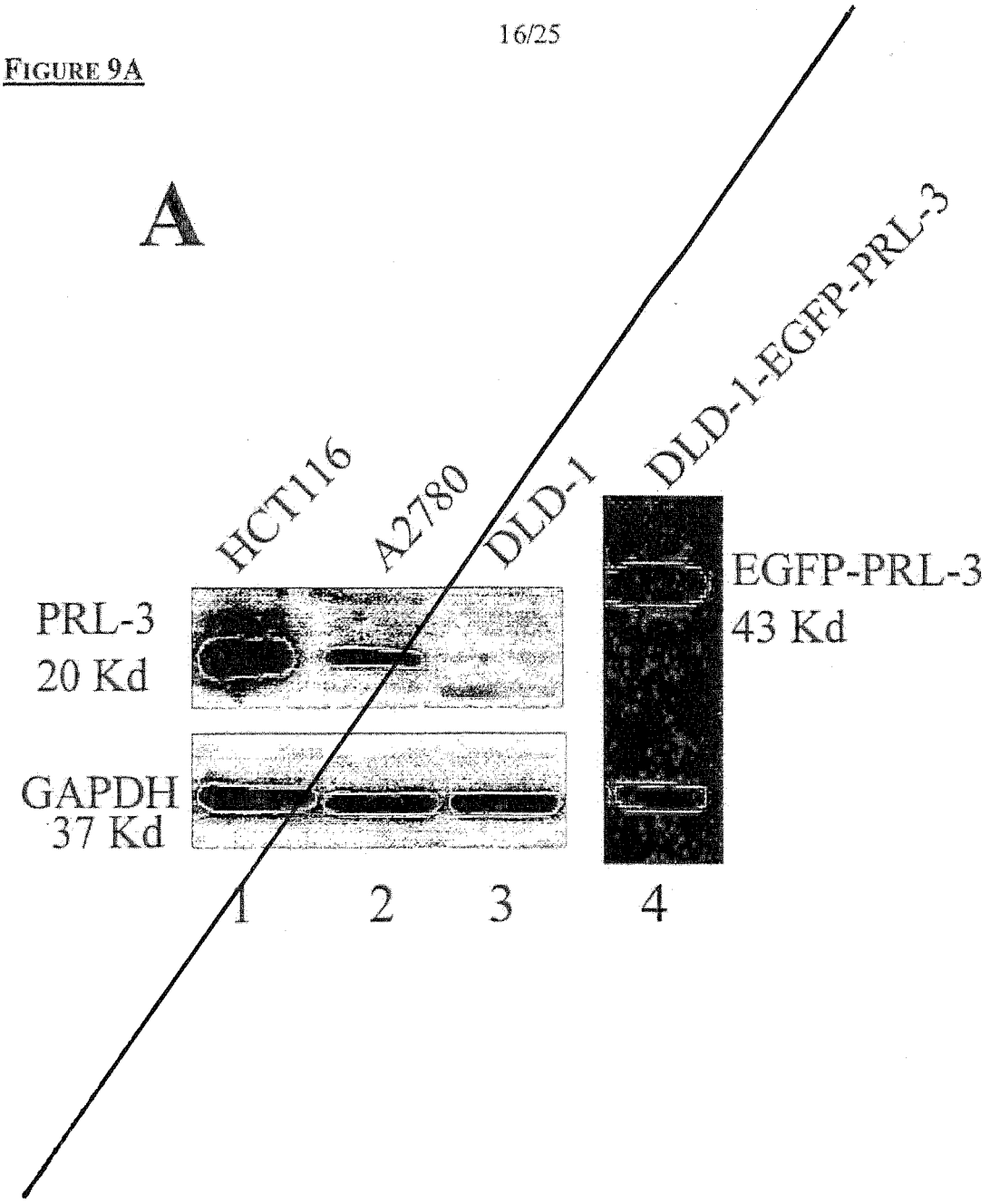

A
HCT116
A2780
DLD-1
DLD-1-EGFP-PRL-3
PRL-3
20 Kd
GAPDH
37 Kd
EGFP-PRL-3
43 Kd
1
2
3
4

FIGURE 9B

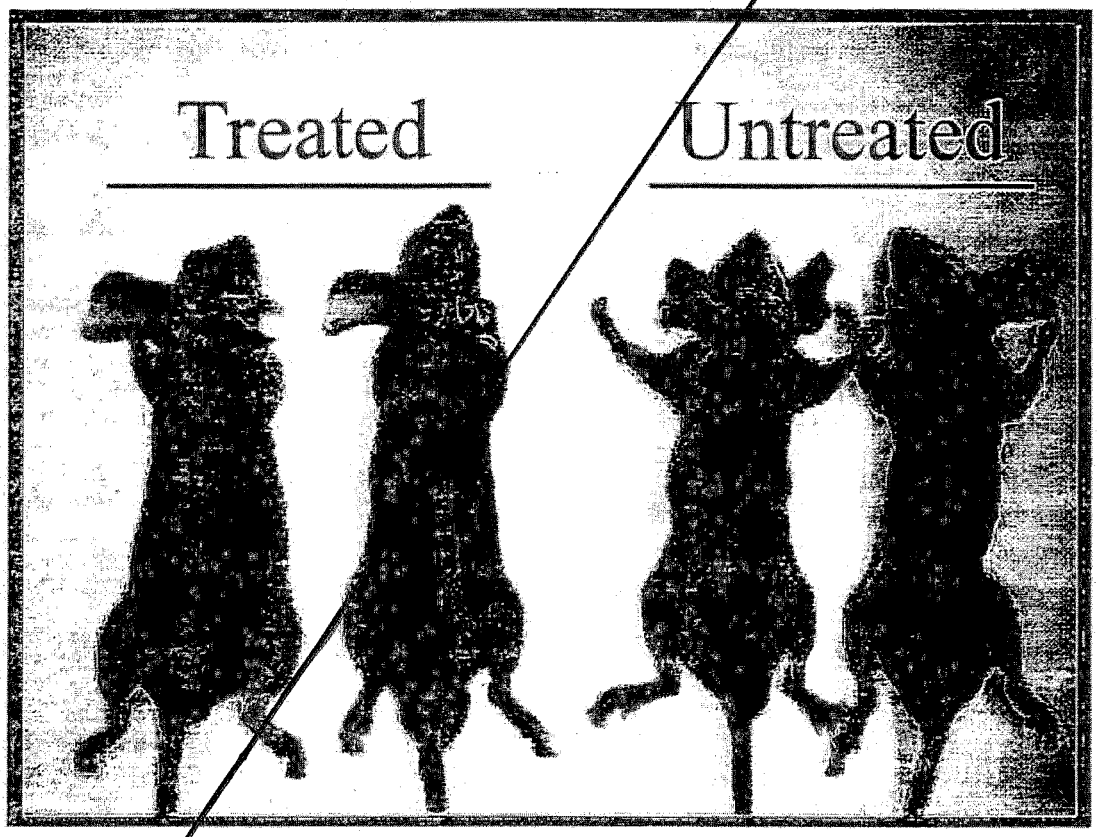


FIGURE 9C

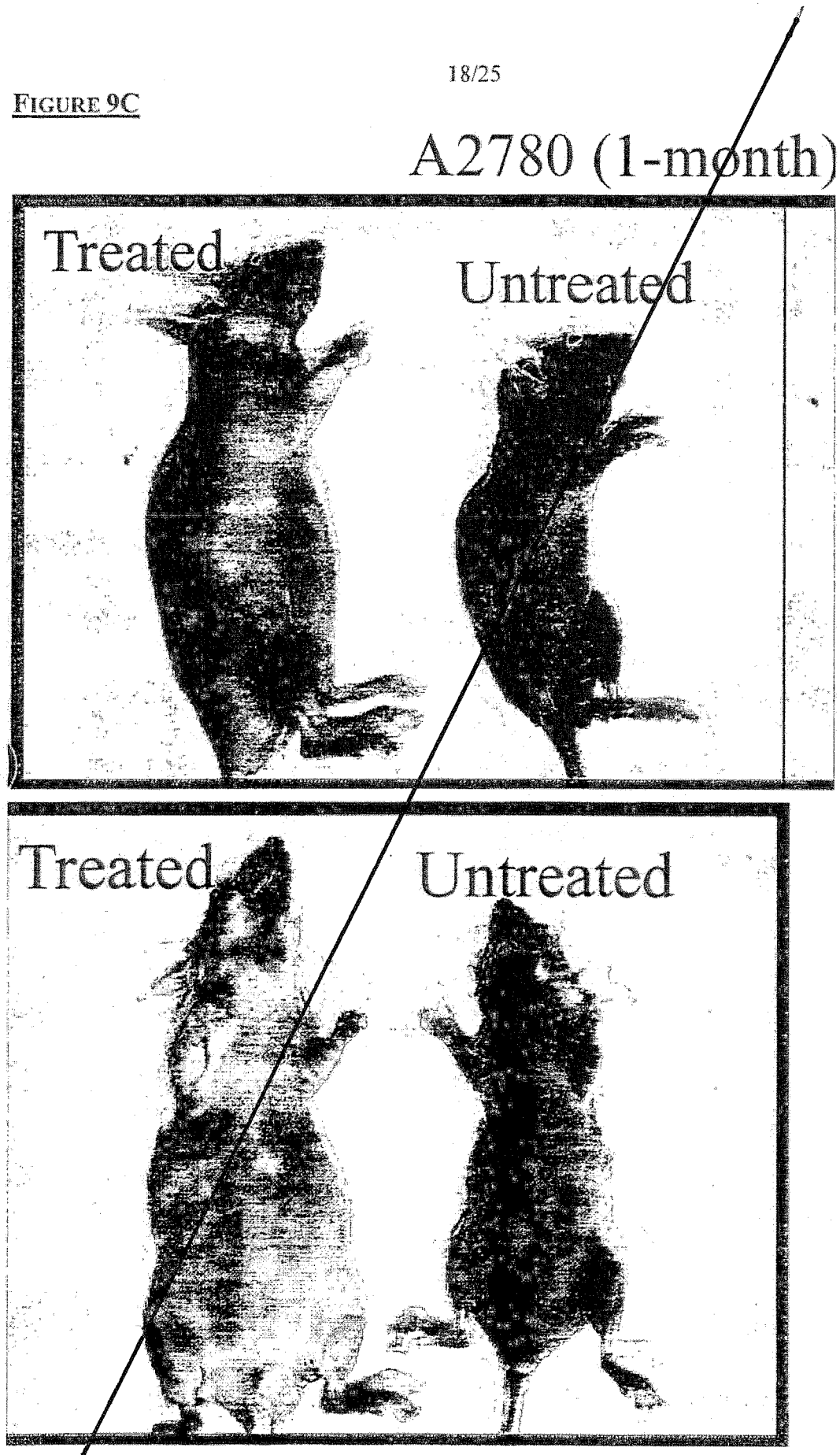


FIGURE 9D

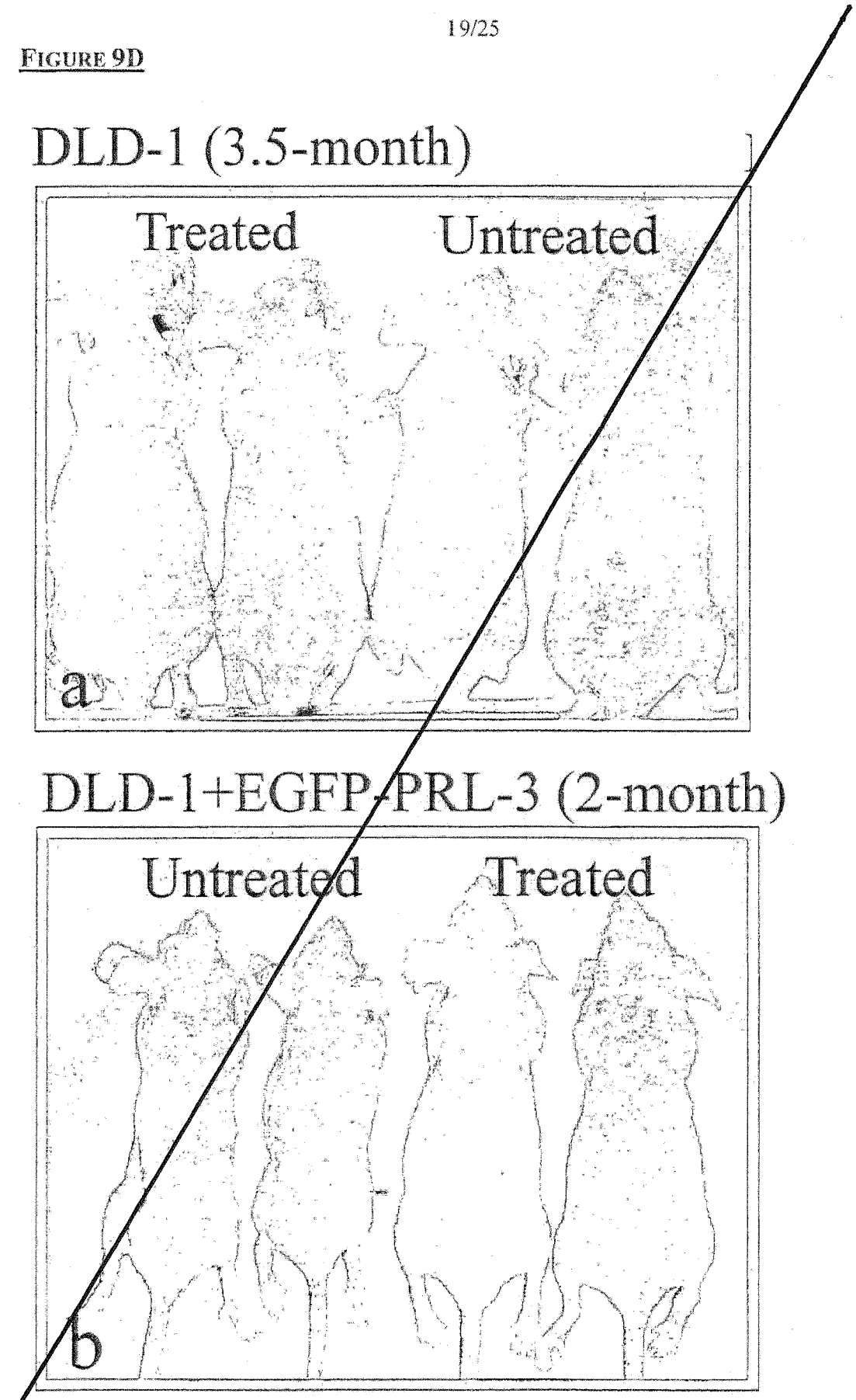

DLD-1 (3.5-month)
Treated
Untreated
a
DLD-1+EGFP-PRL-3 (2-month)
Untreated
Treated
b

FIGURE 10A, 10B

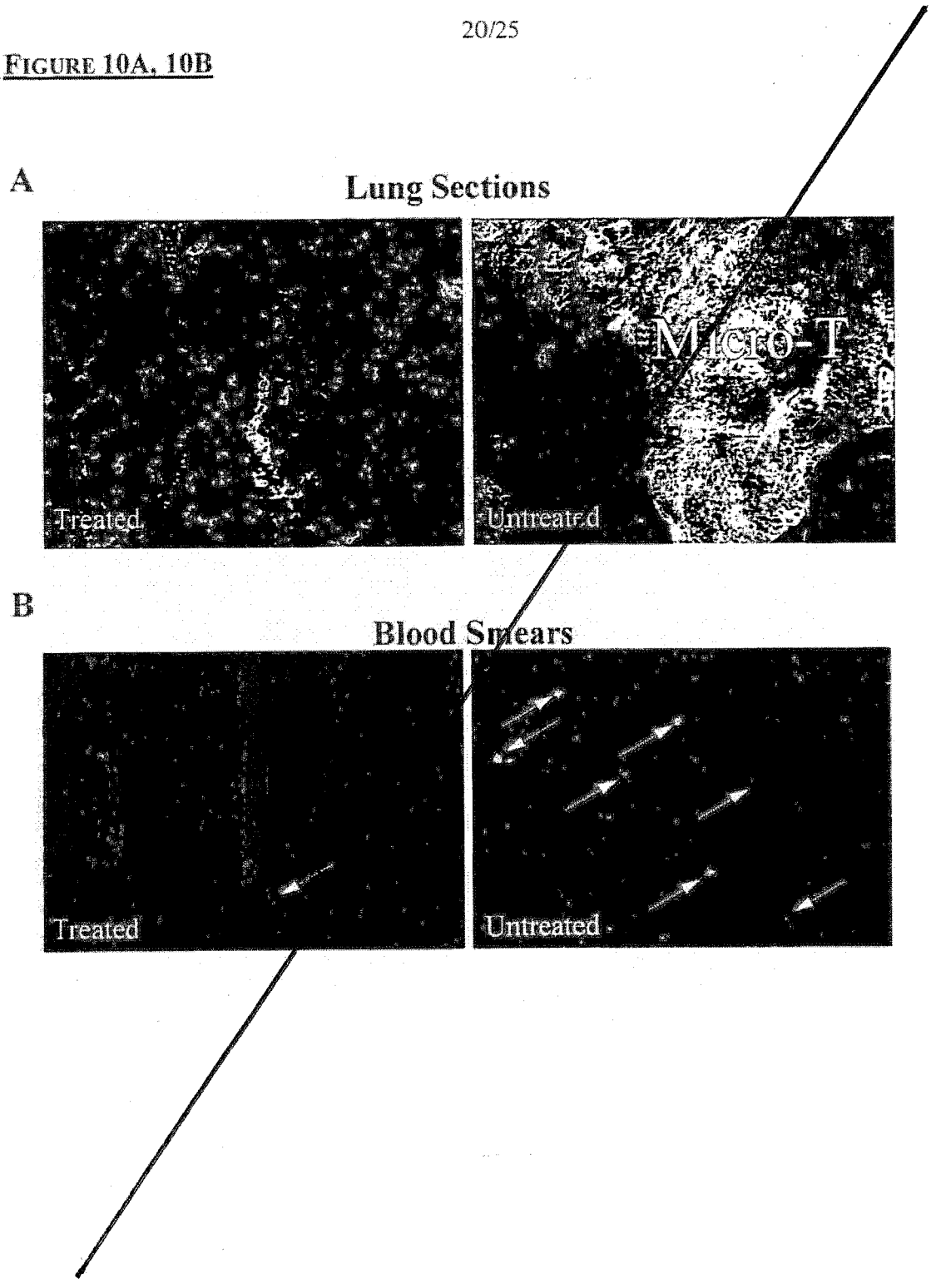


FIGURE 11A

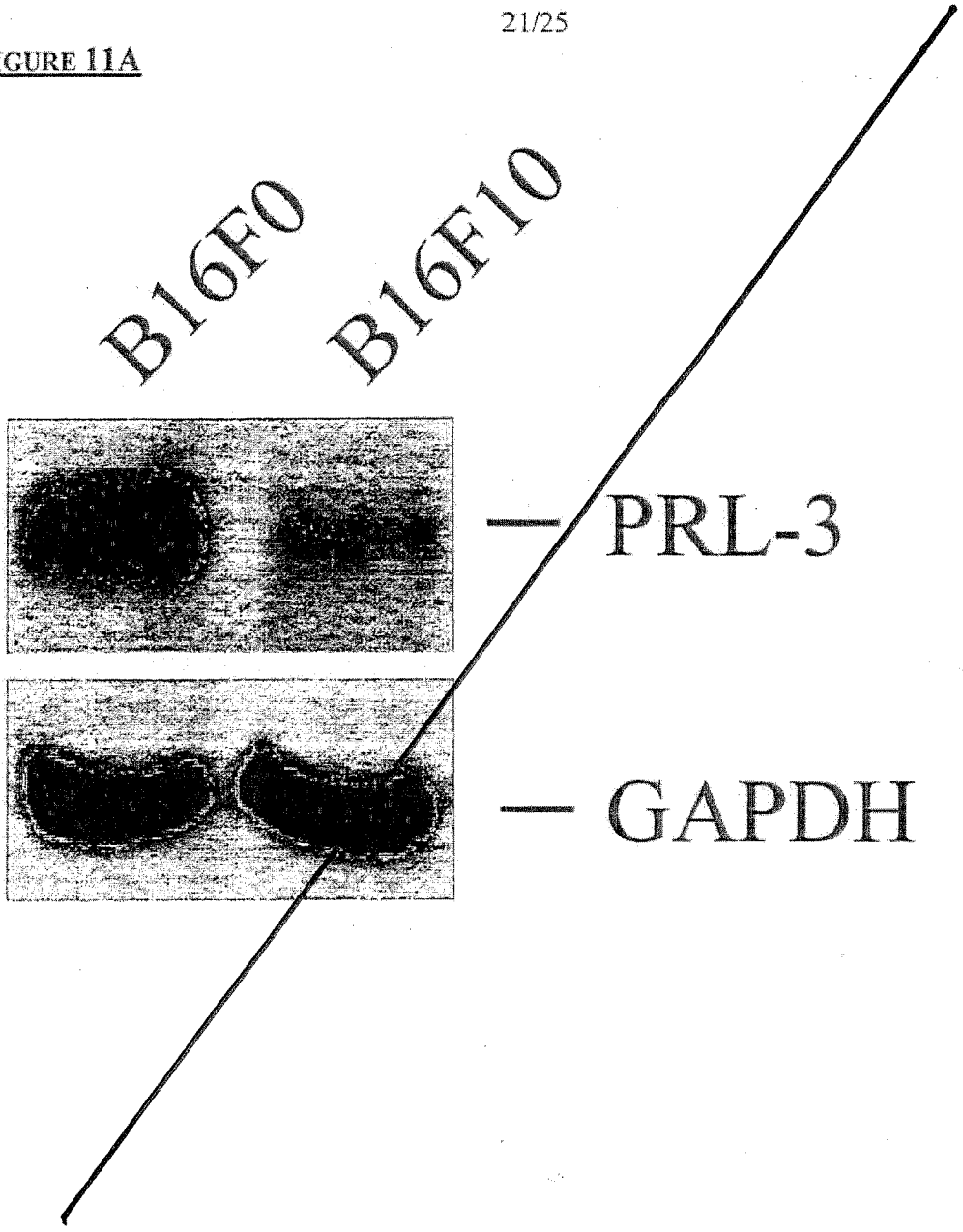


FIGURE 11B

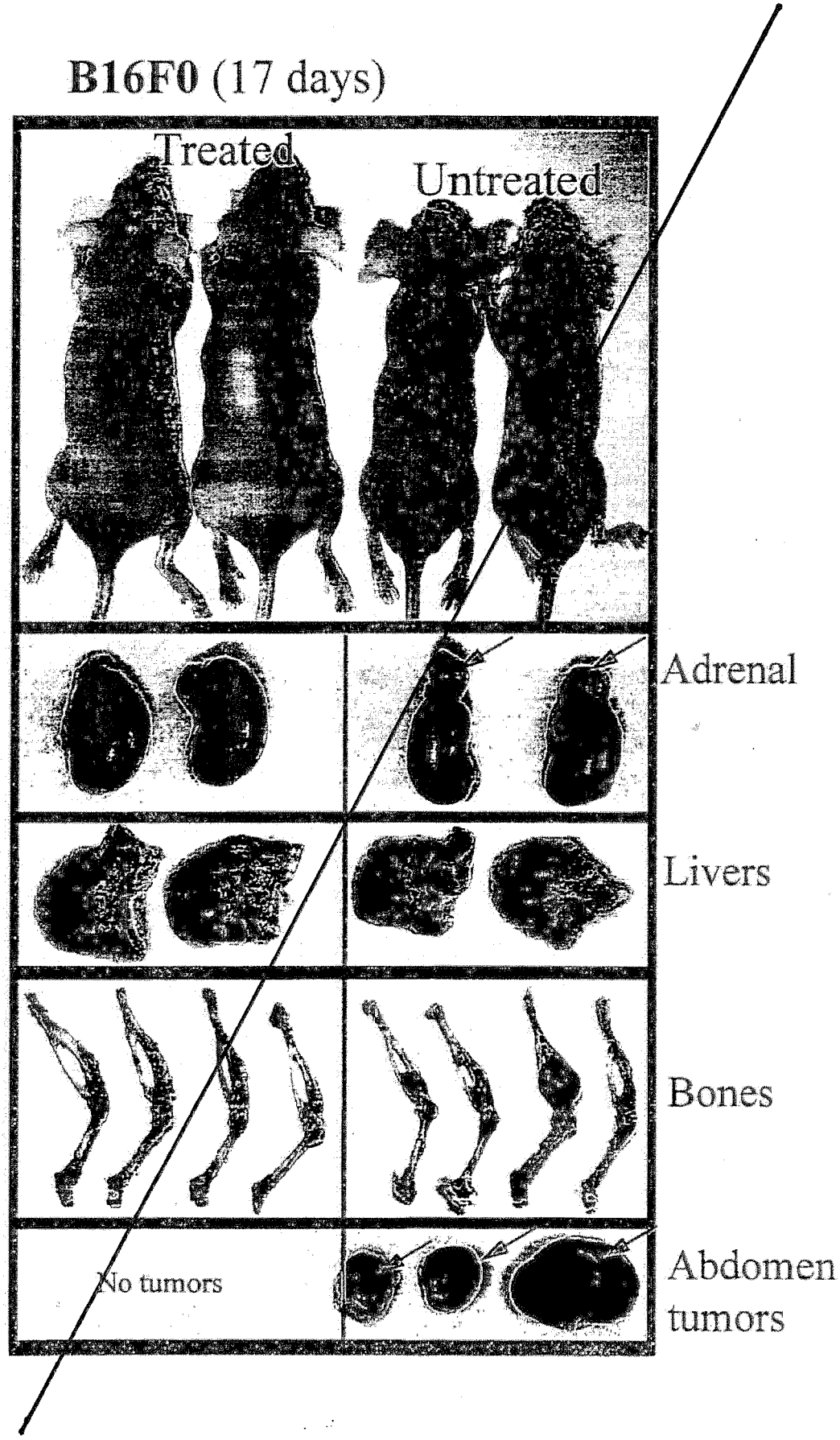
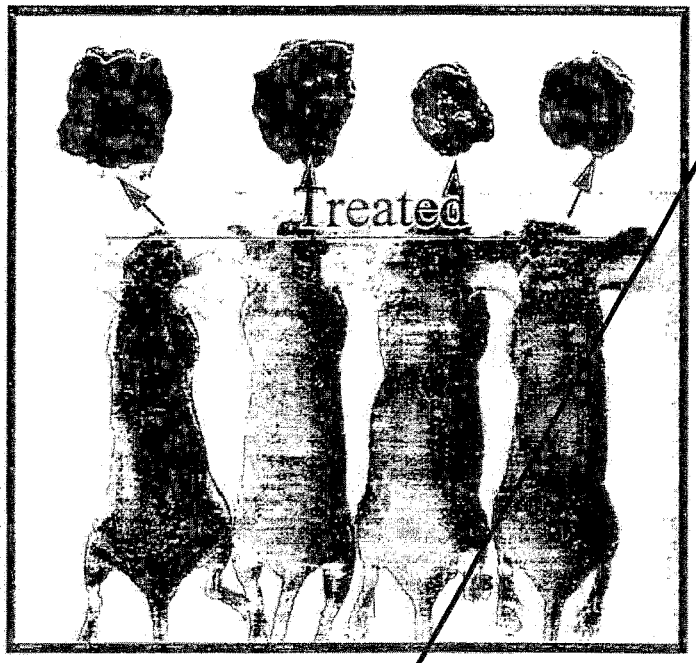

B16F0 (17 days)
Treated
Untreated
Adrenal
Livers
Bones
No tumors
Abdomen tumors

FIGURE 11C, 11D



D



FIGURE 12

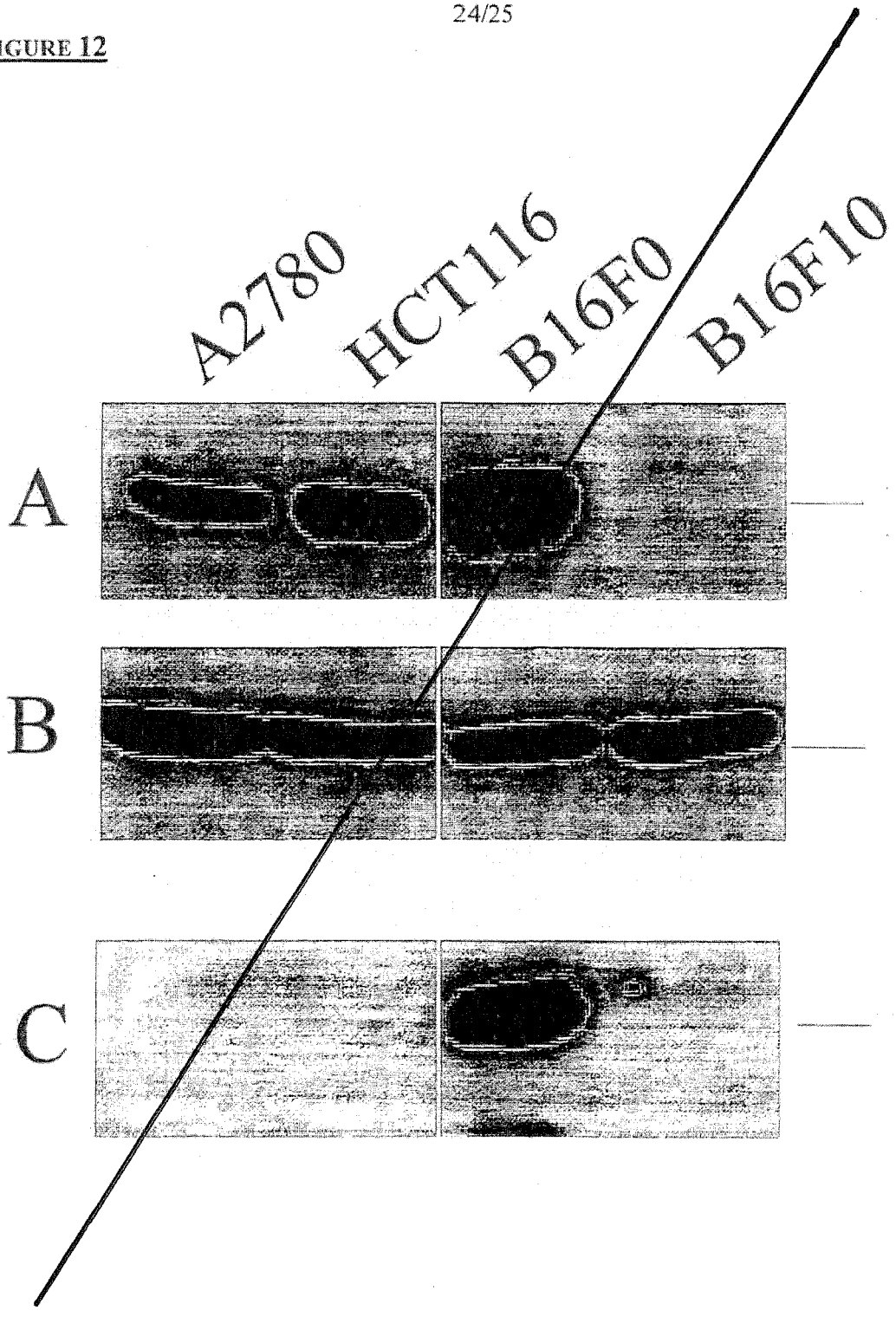


FIGURE 13A, FIGURE 13B

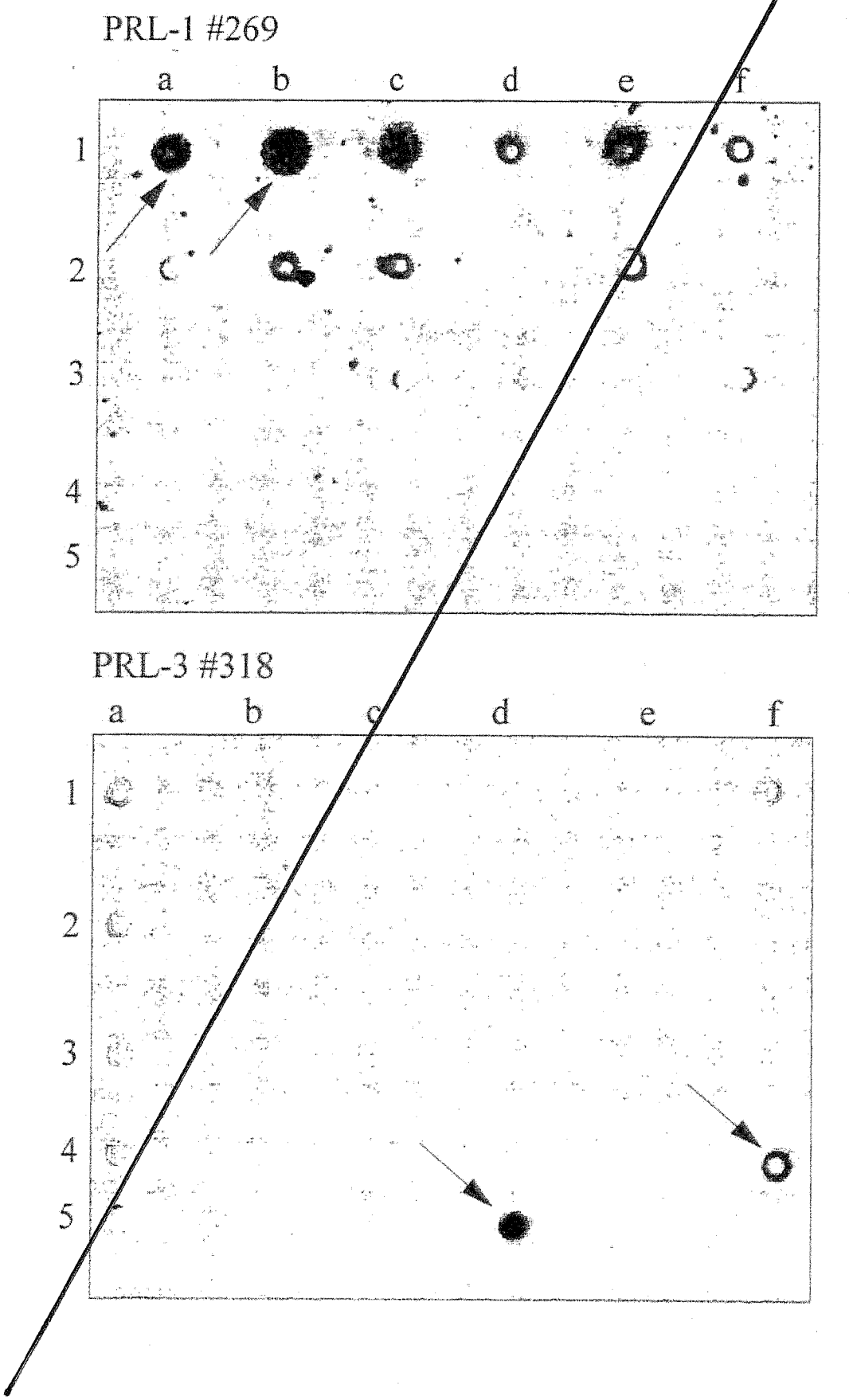


FIGURE 1

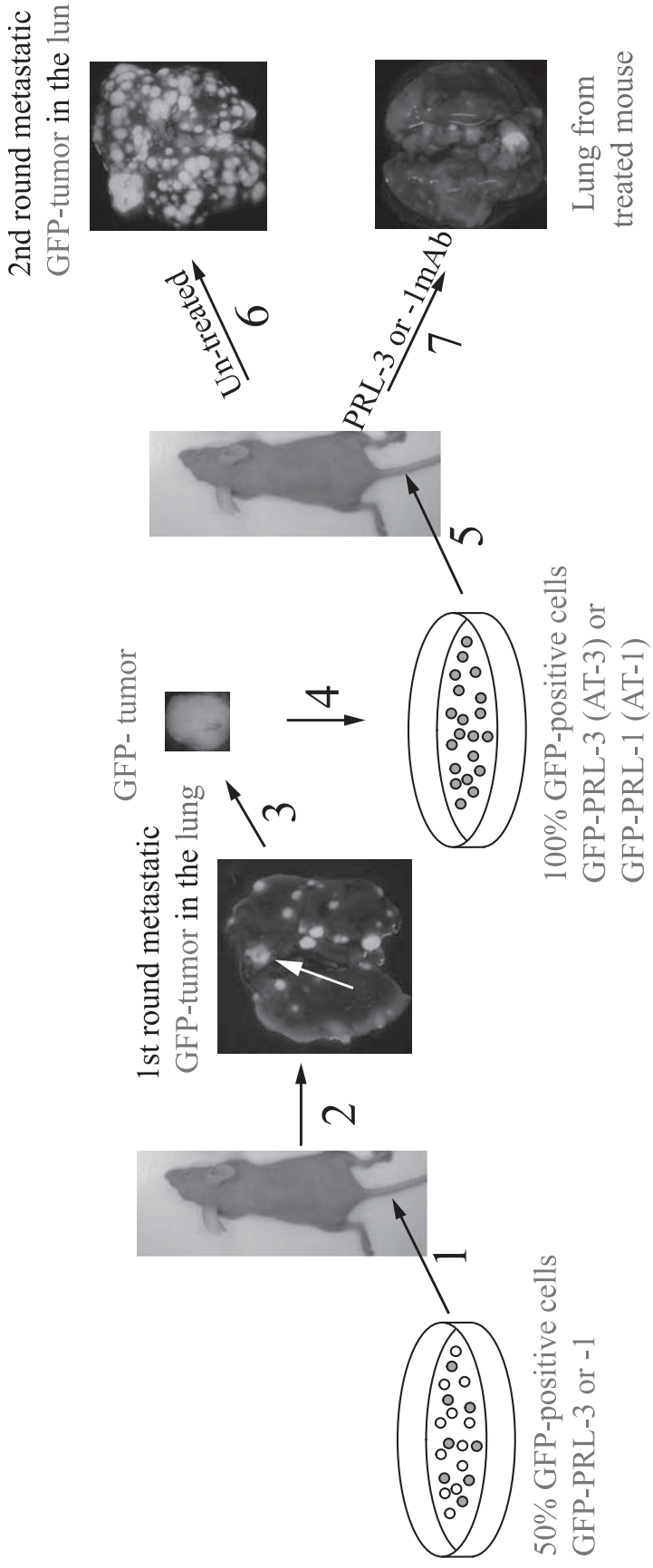

2nd round metastatic
GFP-tumor in the lun
Un-treated
6
PRL-3 or -1mAb
7
Lung from
treated mouse
GFP- tumor
1st round metastatic
GFP-tumor in the lung
3
4
5
2
1
100% GFP-positive cells
GFP-PRL-3 (AT-3) or
GFP-PRL-1 (AT-1)
50% GFP-positive cells
GFP-PRL-3 or -1

FIGURE 2A

PRL-3 mAb blocks EGFP-PRL-3 metastatic lung tumors

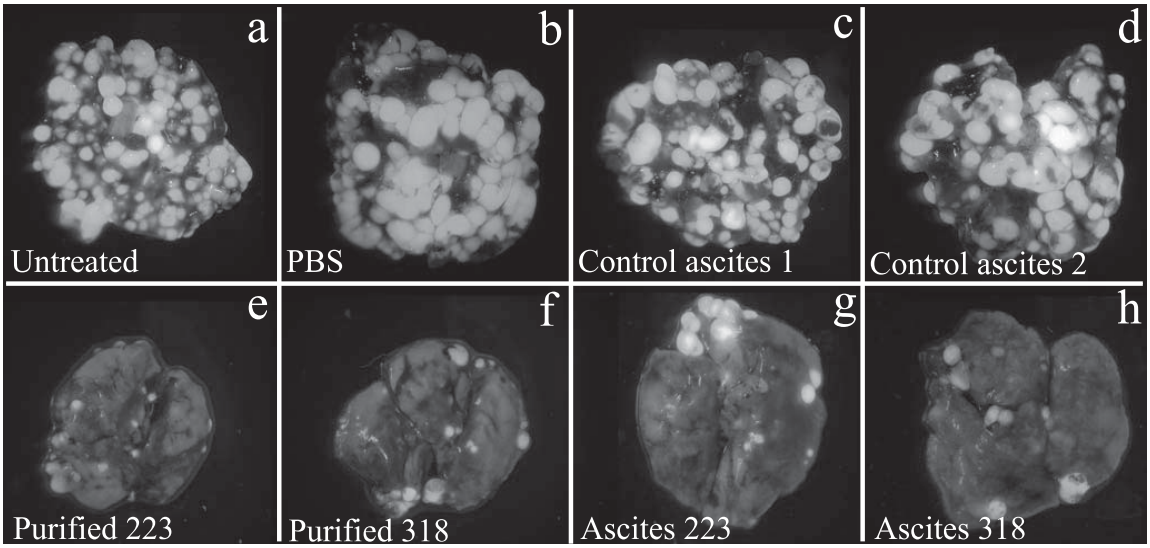


FIGURE 2B

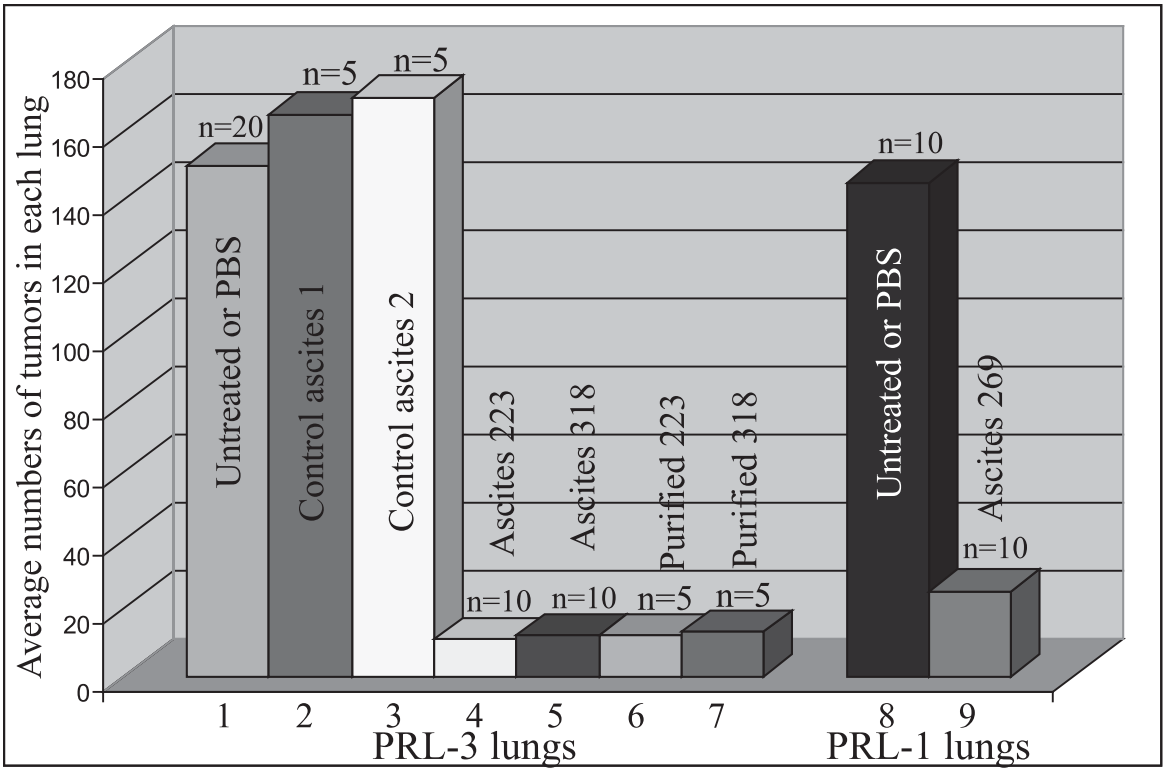

Average numbers of tumors in each lung
0
20
40
60
80
100
120
140
160
180
n=20
n=5
n=5
n=10
n=10
n=5
n=5
n=10
Untreated or PBS
Control ascites 1
Control ascites 2
Ascites 223
Ascites 318
Purified 223
Purified 318
Untreated or PBS
Ascites 269
1
2
3
4
5
6
7
8
9
PRL-3 lungs
PRL-1 lungs

FIGURE 3

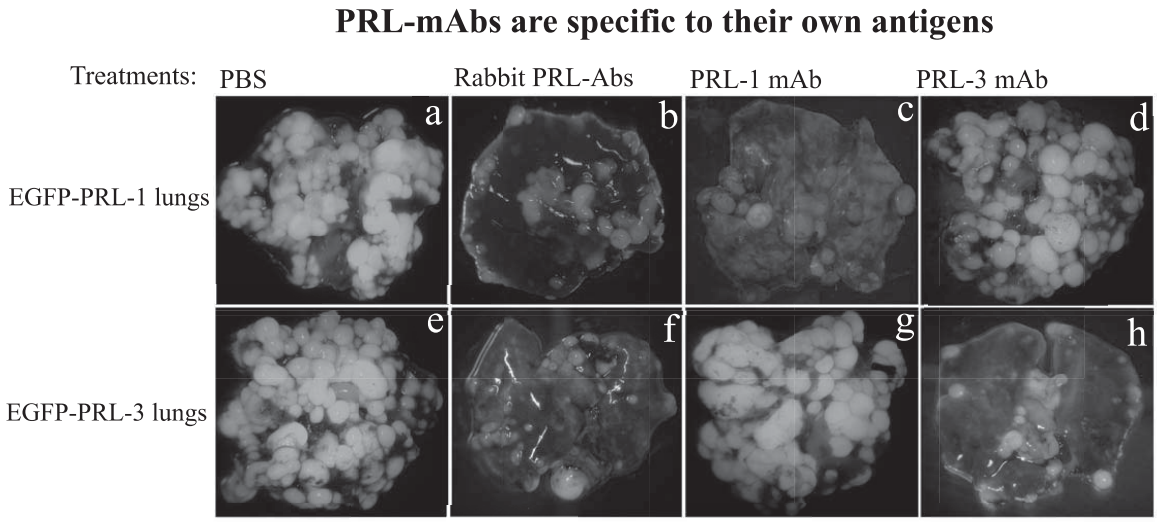

PRL-mAbs are specific to their own antigens
Treatments:
PBS
Rabbit PRL-Abs
PRL-1 mAb
PRL-3 mAb
EGFP-PRL-1 lungs
EGFP-PRL-3 lungs
a
b
c
d
e
f
g
h

FIGURE 4A

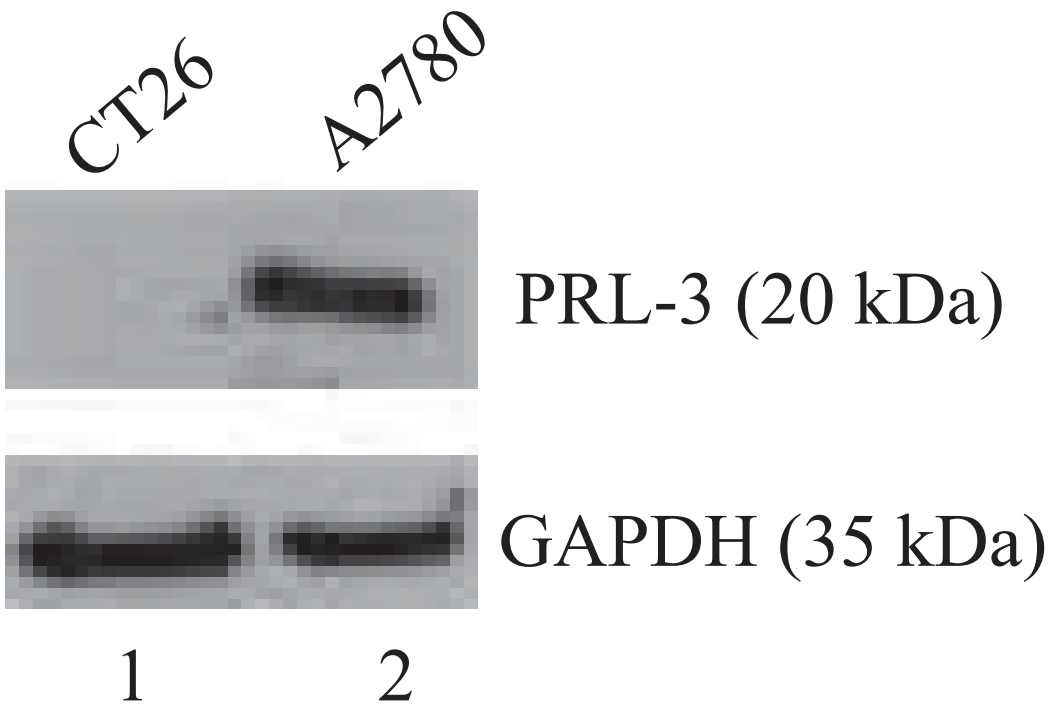


FIGURE 4B

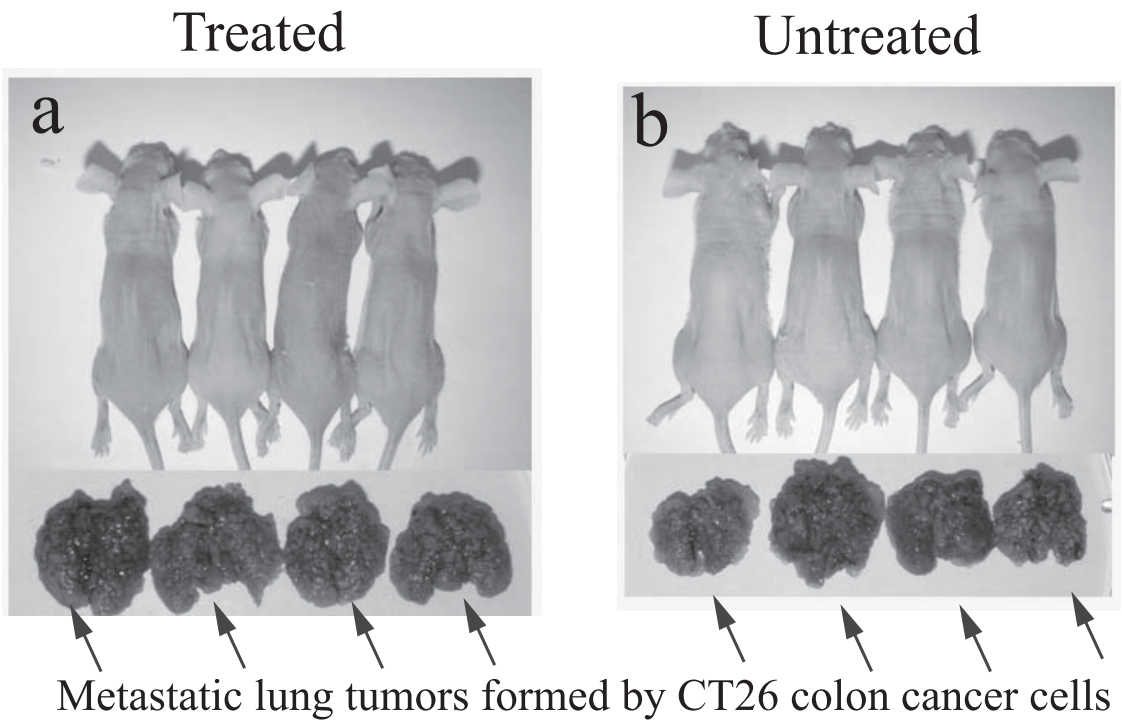
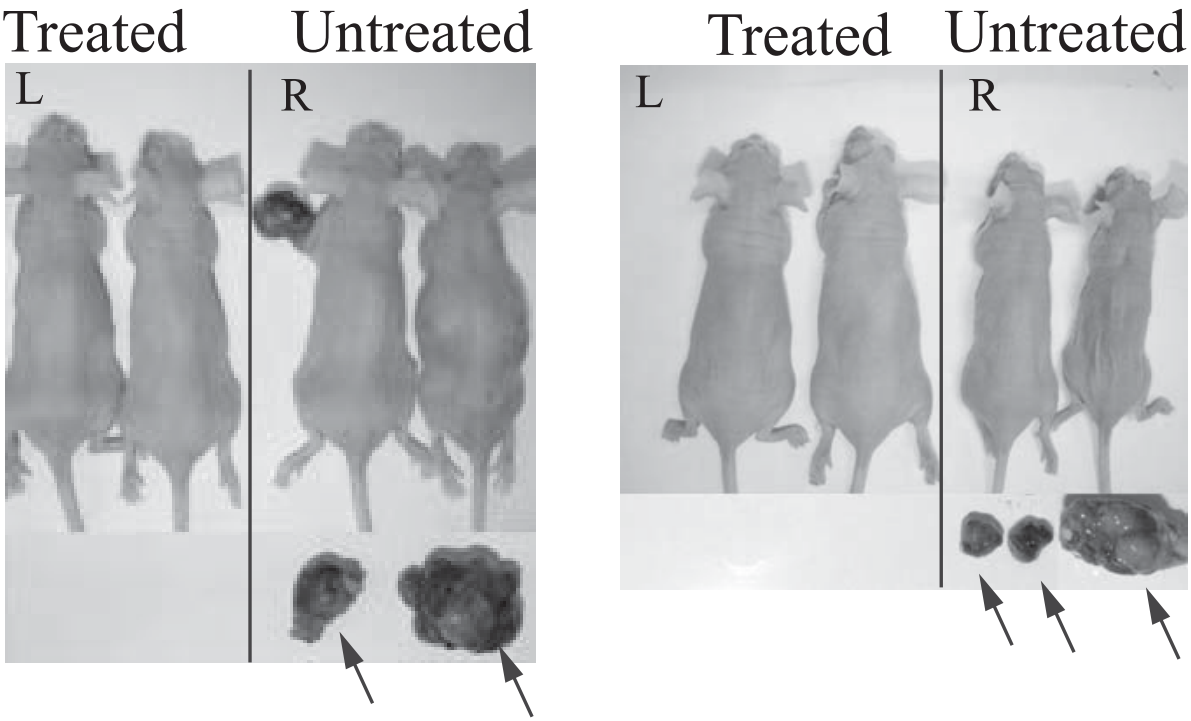

Treated
Untreated
a
b
Metastatic lung tumors formed by CT26 colon cancer cells

FIGURE 4C



Tumours formed by A2780 human ovarian cancer cells

FIGURE 5A

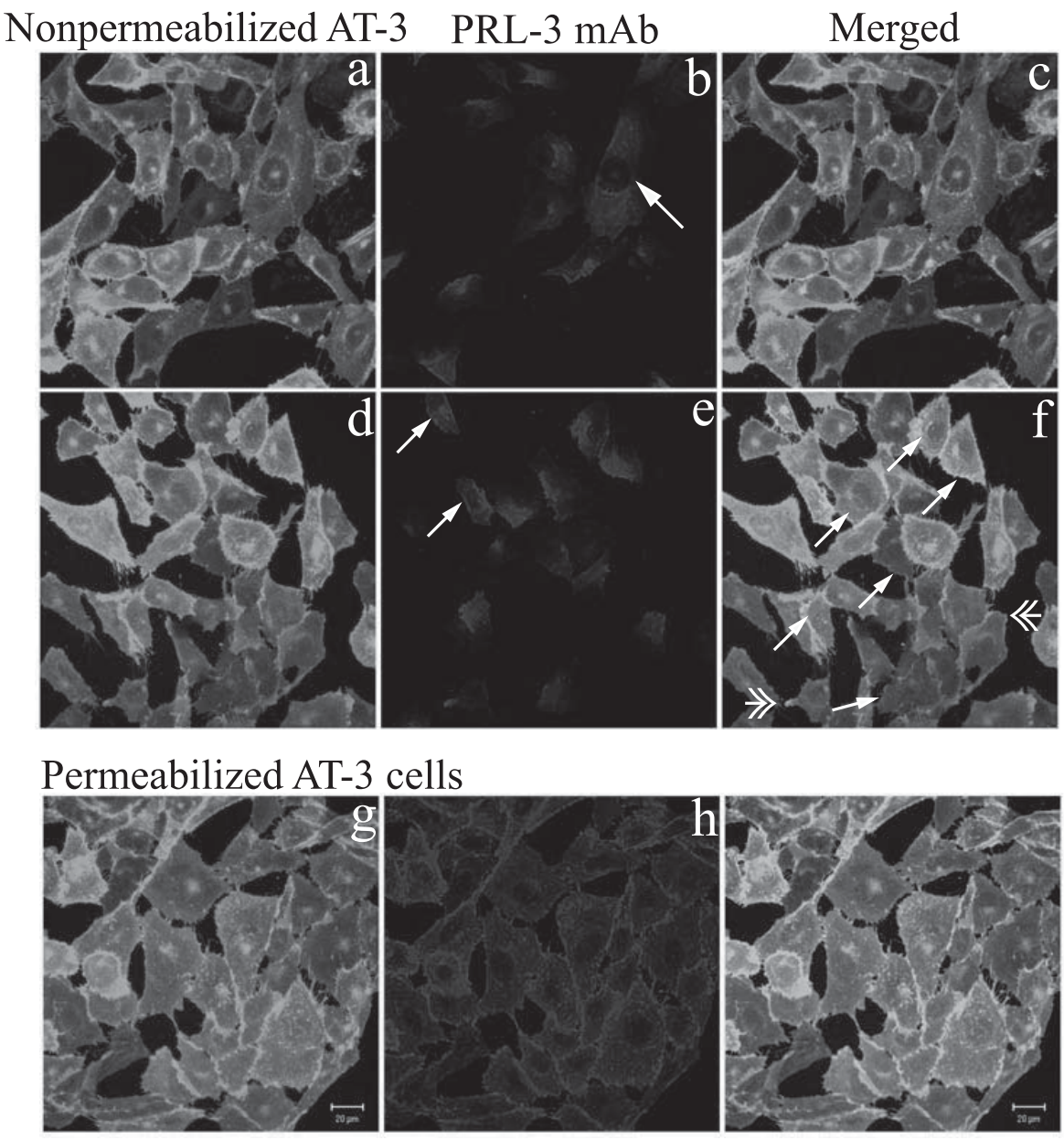

Nonpermeabilized AT-3
PRL-3 mAb
Merged
a
b
c
d
e
f
Permeabilized AT-3 cells
g
h

FIGURE 5B

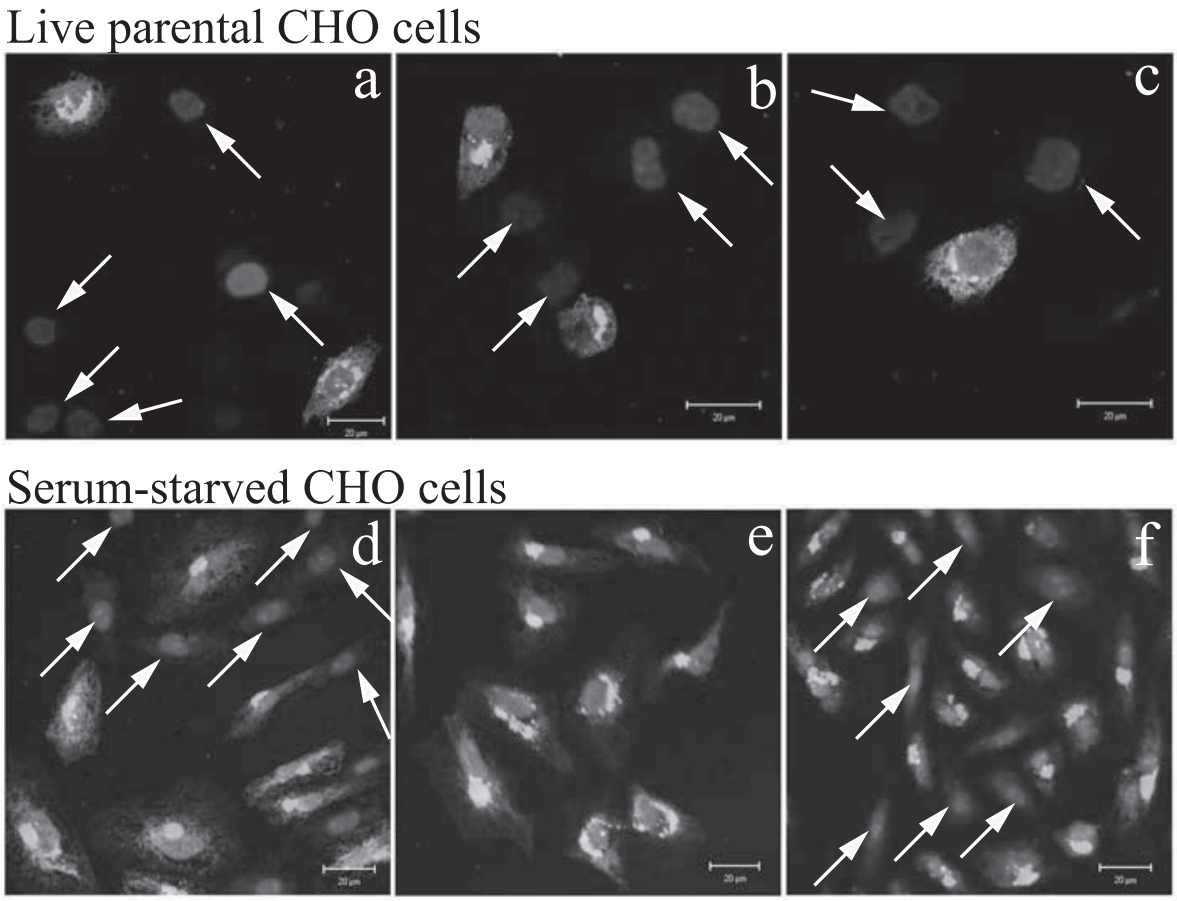


FIGURE 6

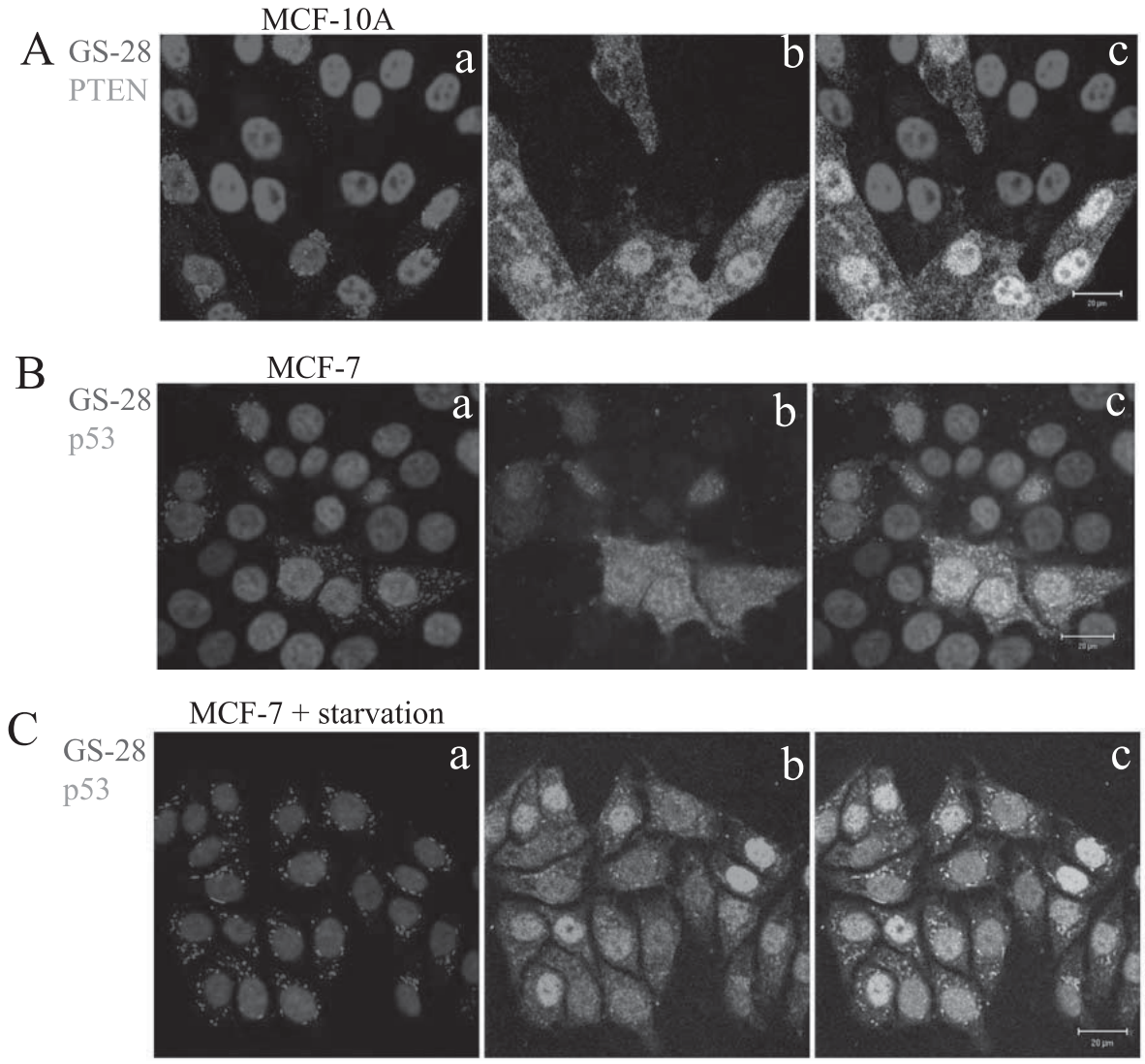

A
GS-28
PTEN
MCF-10A
a
b
c
B
GS-28
p53
MCF-7
a
b
c
C
GS-28
p53
MCF-7 + starvation
a
b
c

FIGURE 7

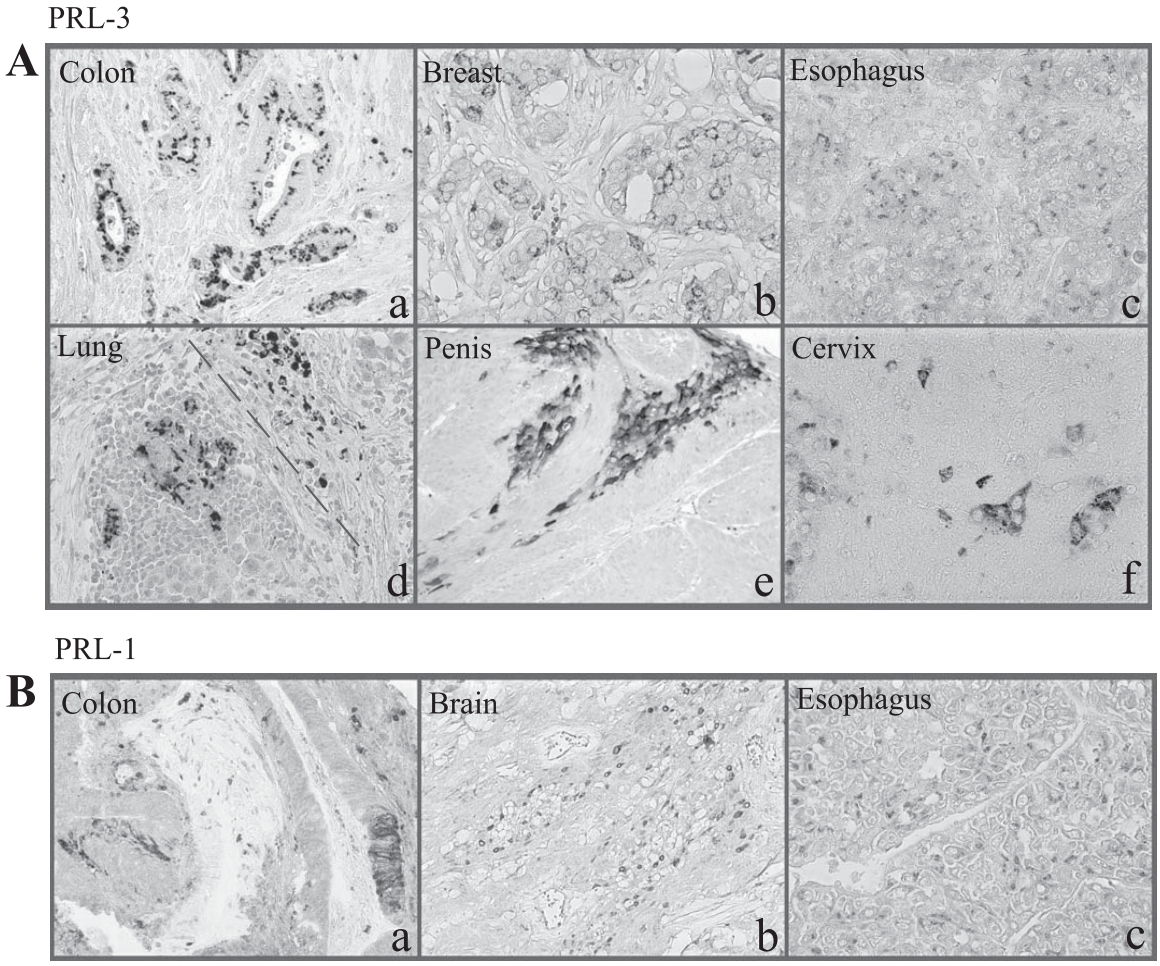

PRL-3
A
Colon
a
Breast
b
Esophagus
c
Lung
d
Penis
e
Cervix
f
PRL-1
B
Colon
a
Brain
b
Esophagus
c

FIGURE 8A

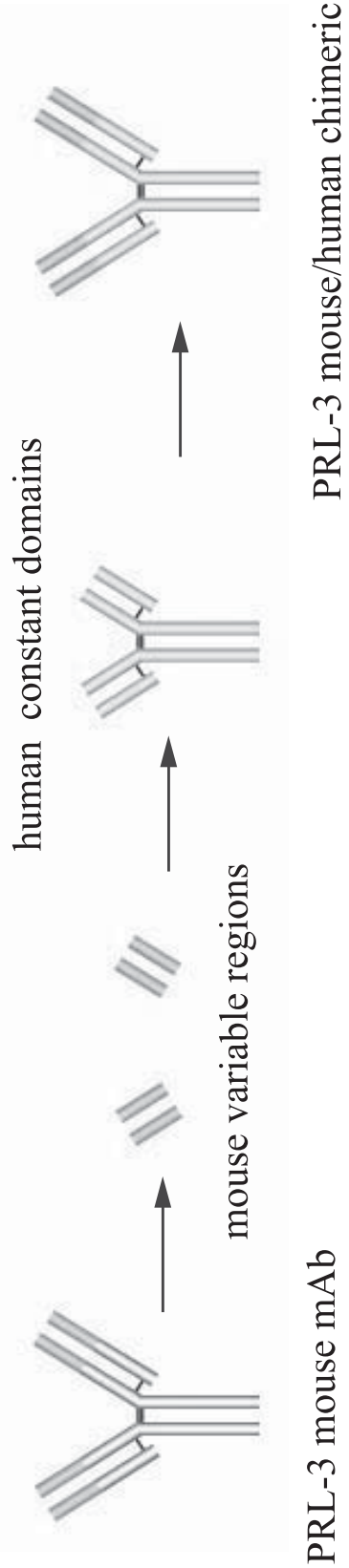

PRL-3 mouse mAb
mouse variable regions
human constant domains
PRL-3 mouse/human chimeric mAb

FIGURE 8B

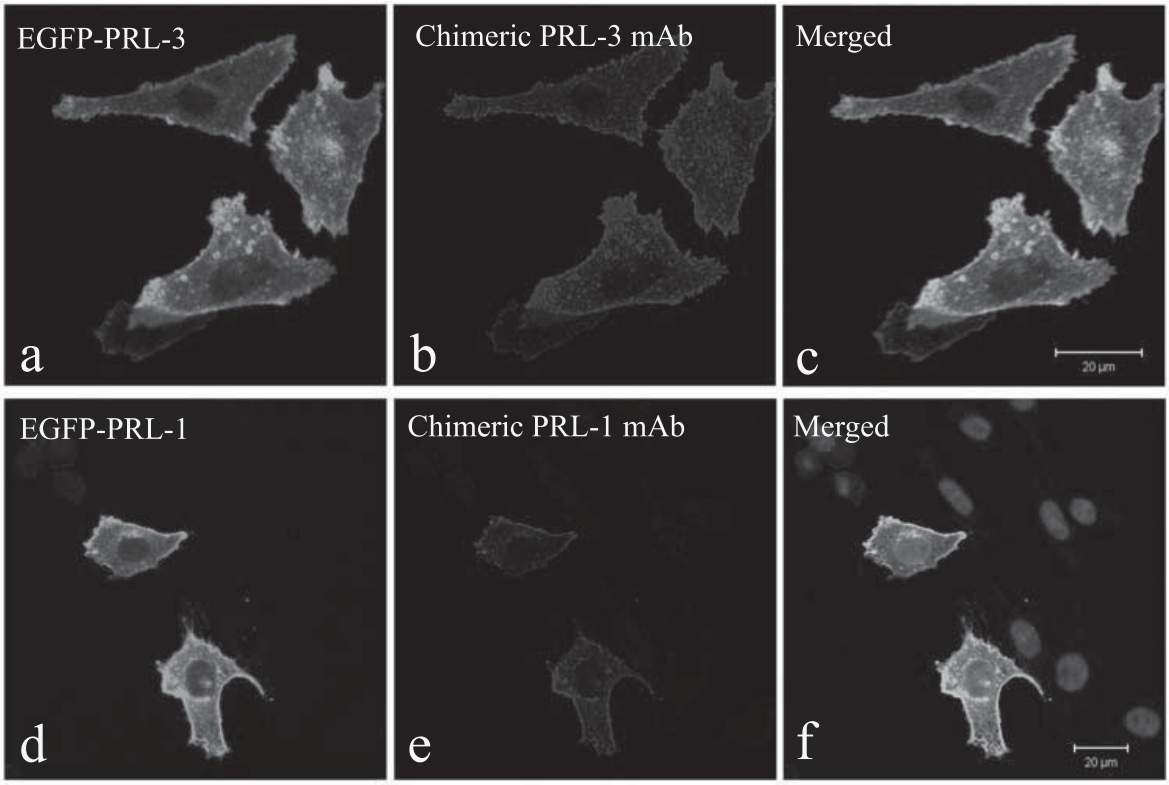

EGFP-PRL-3
Chimeric PRL-3 mAb
Merged
a
b
c
20 µm
EGFP-PRL-1
Chimeric PRL-1 mAb
Merged
d
e
f
20 µm

FIGURE 8C

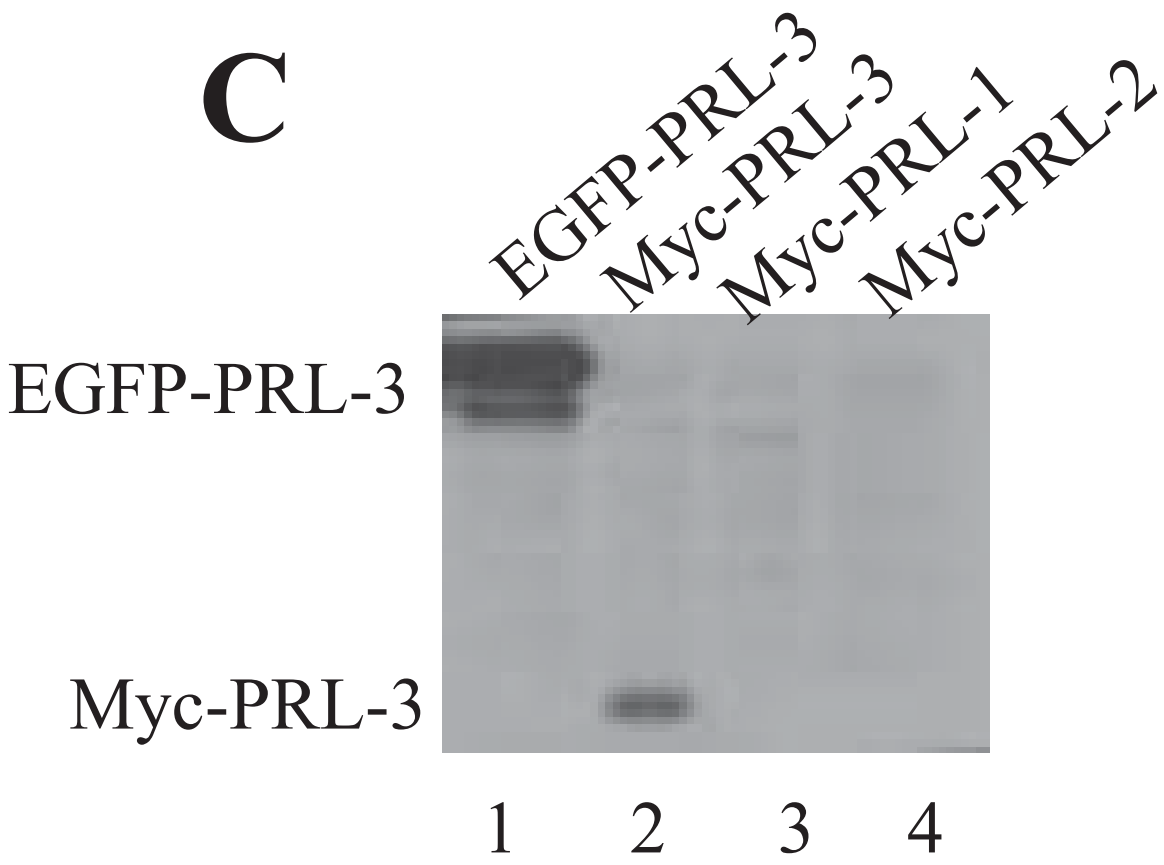


FIGURE 8D

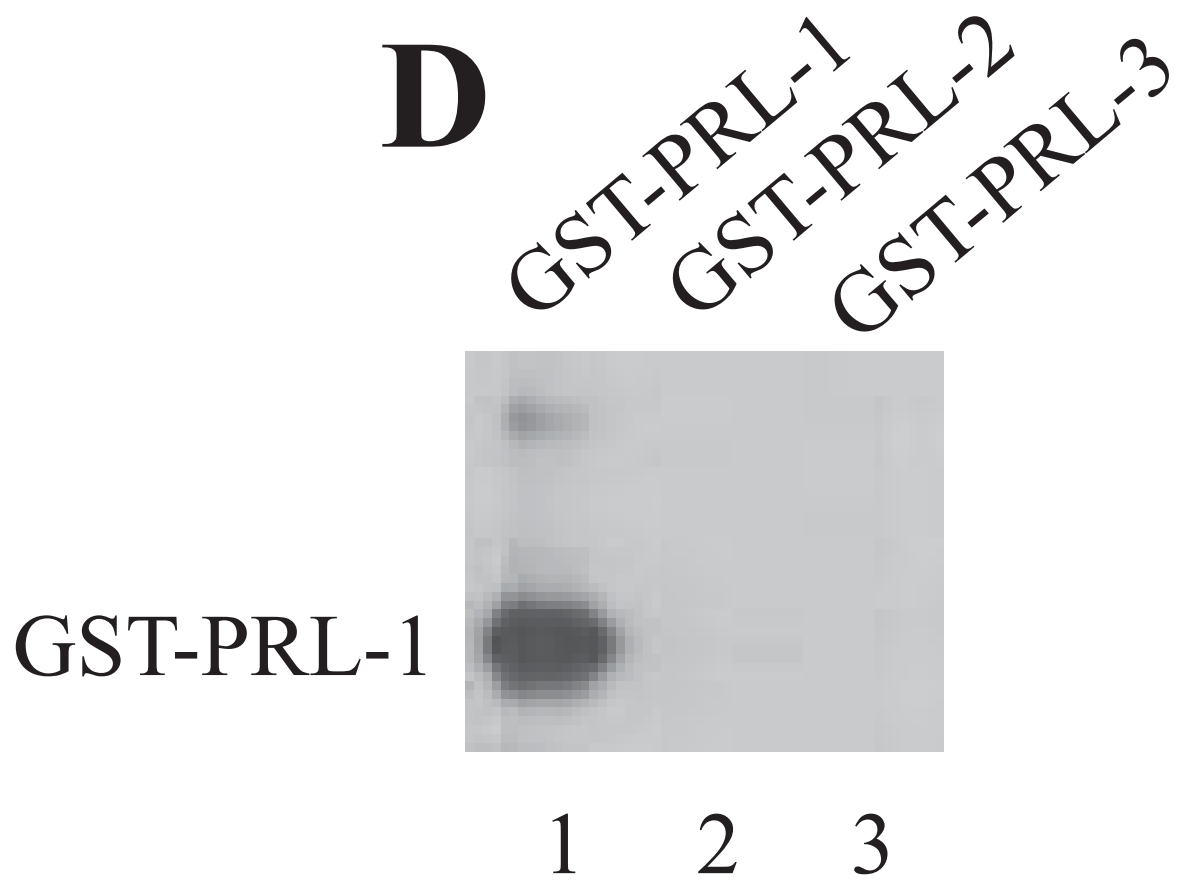


FIGURE 9A

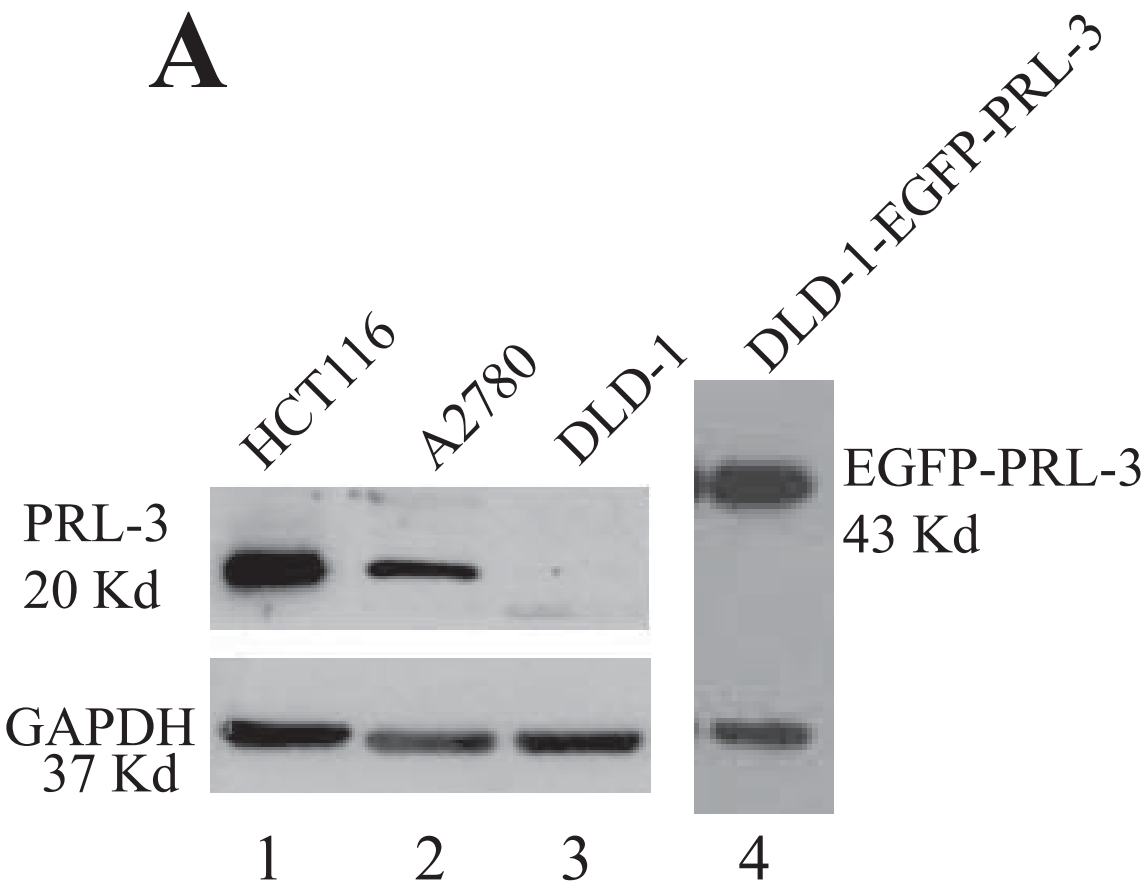

A
HCT116
A2780
DLD-1
DLD-1-EGFP-PRL-3
PRL-3
20 Kd
GAPDH
37 Kd
EGFP-PRL-3
43 Kd
1
2
3
4

FIGURE 9B

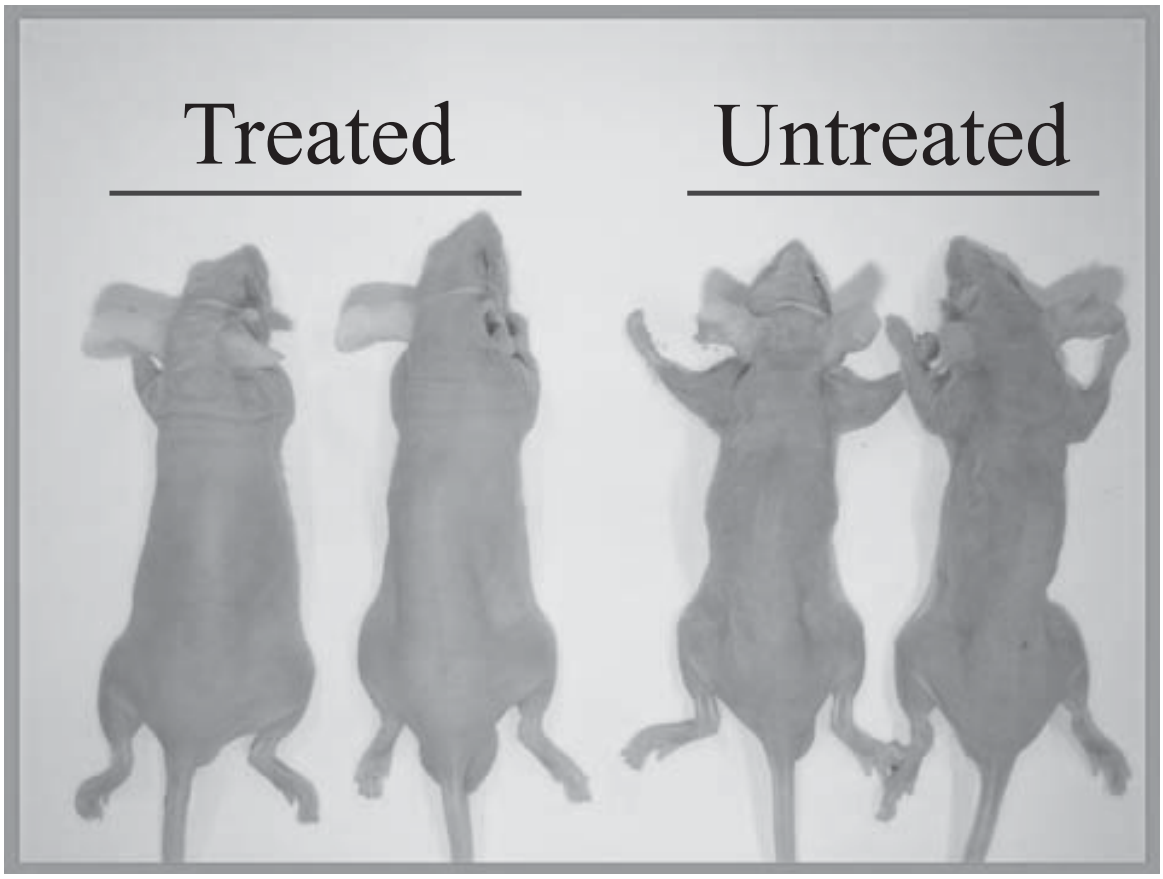


FIGURE 9C

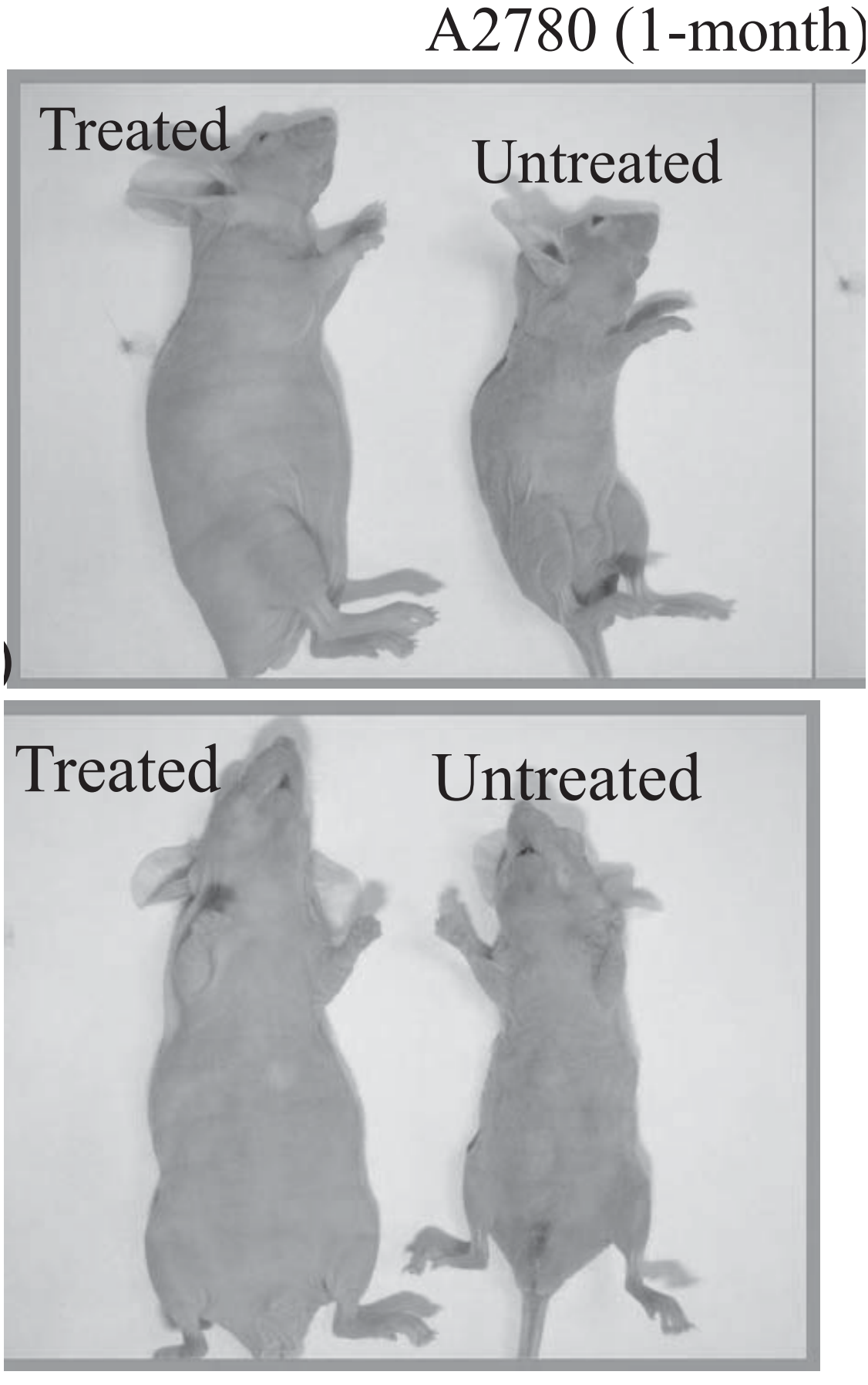
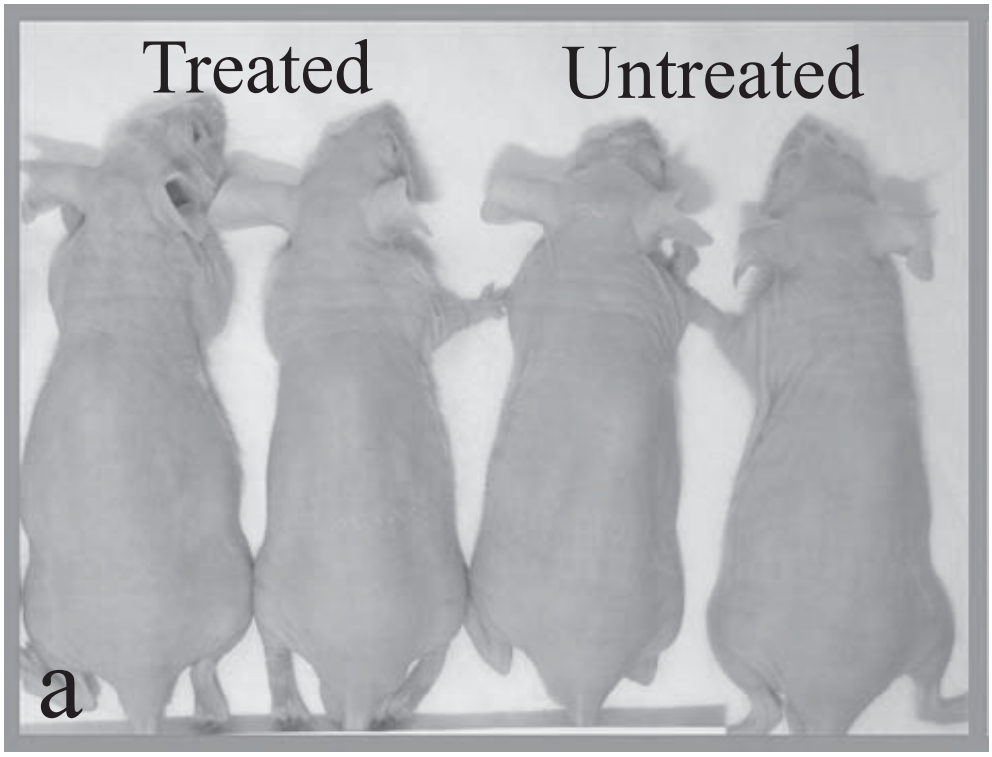


FIGURE 9D

DLD-1 (3.5-month)



DLD-1+EGFP-PRL-3 (2-month)

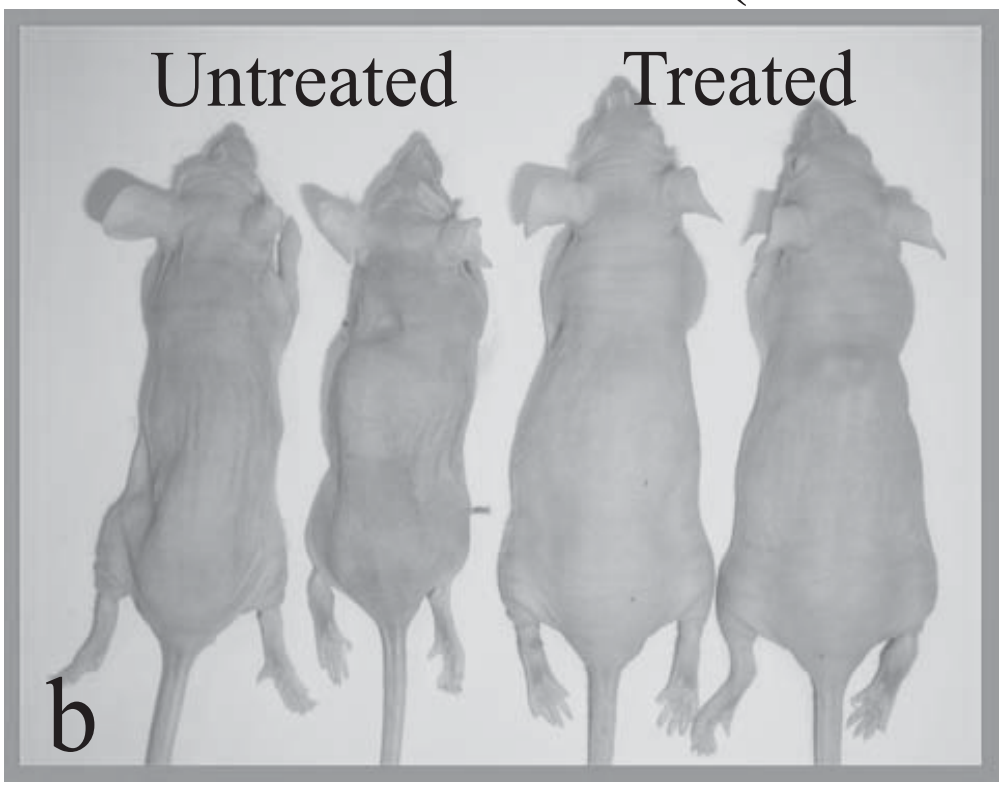
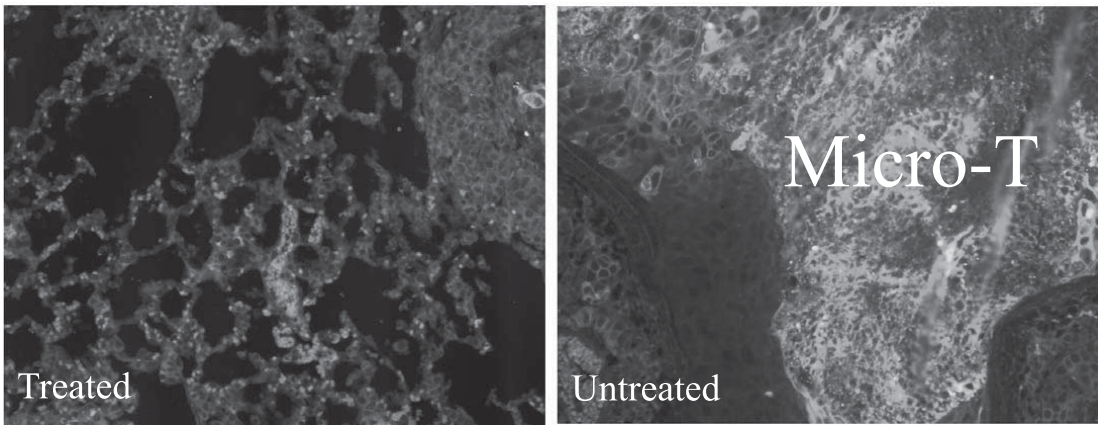


FIGURE 10A, 10B

A

Lung Sections



B

Blood Smears

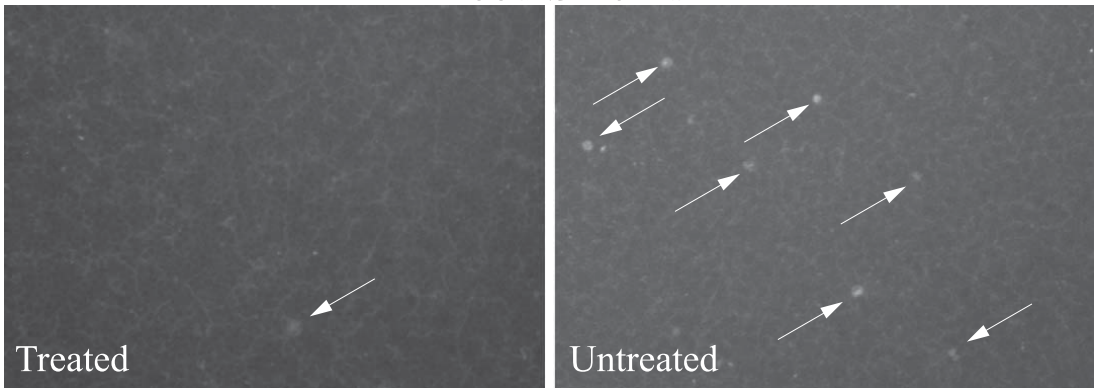


FIGURE 11A

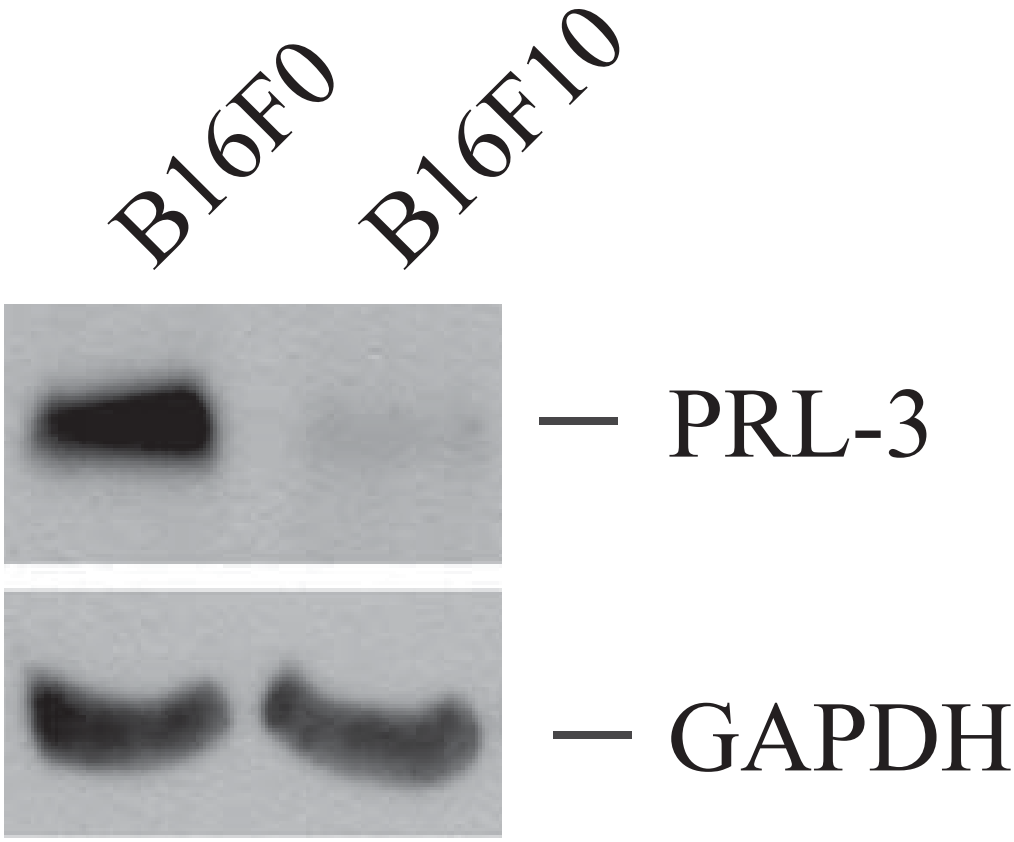


FIGURE 11B

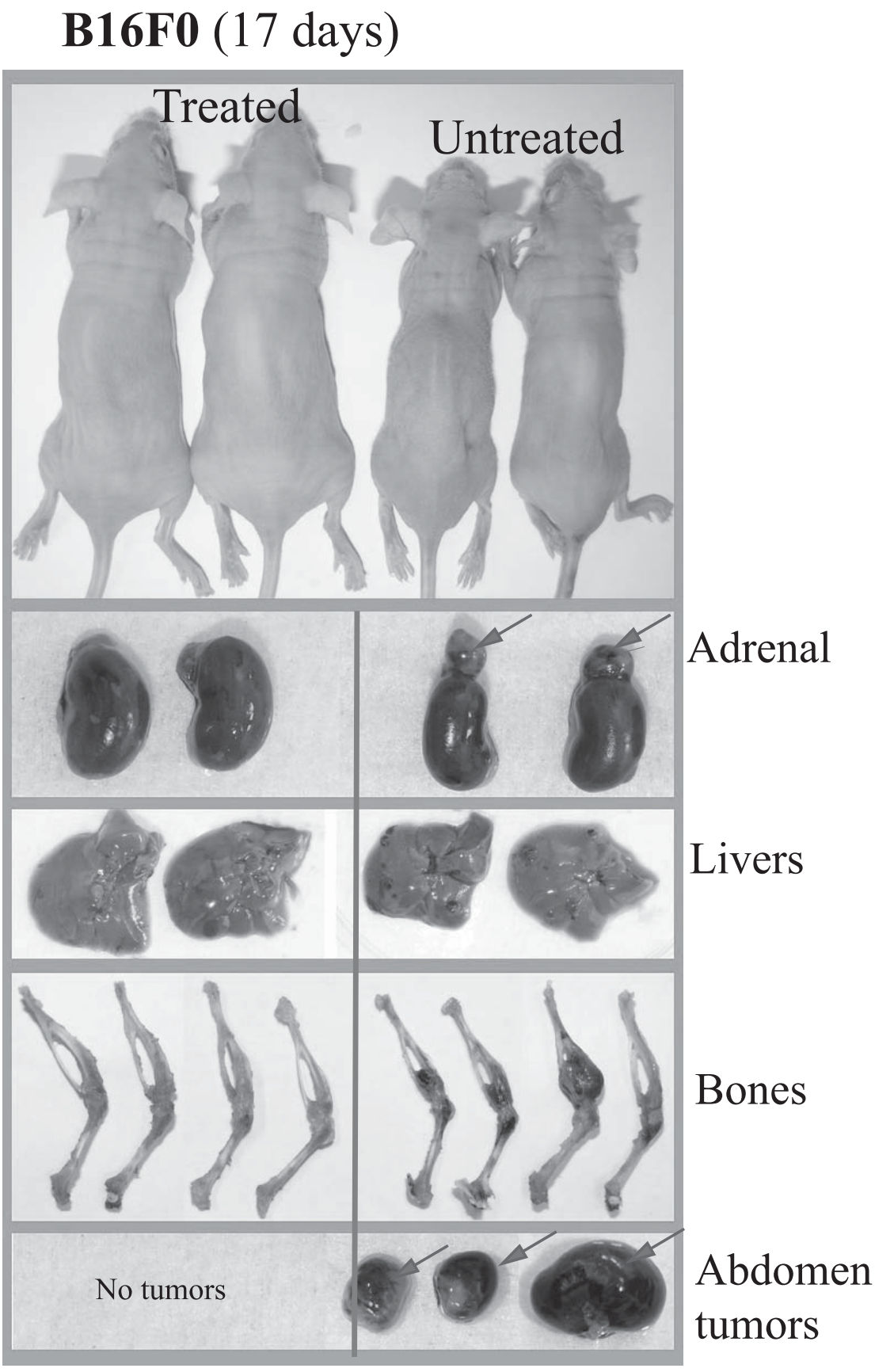

B16F0 (17 days)
Treated
Untreated
Adrenal
Livers
Bones
No tumors
Abdomen tumors

FIGURE 11C, 11D

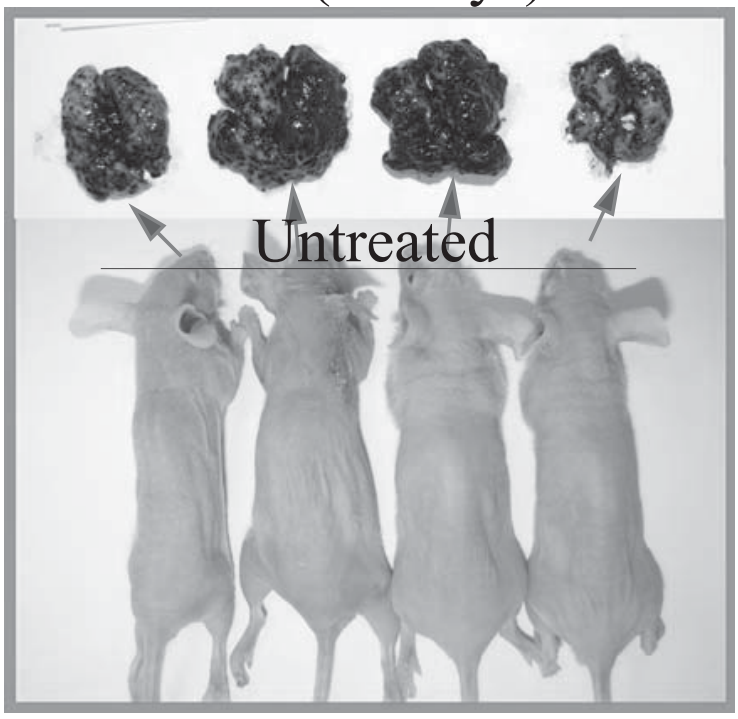
B16F10 (17 days)



Lungs

D

B16F10 (17 days)



Lungs

FIGURE 12

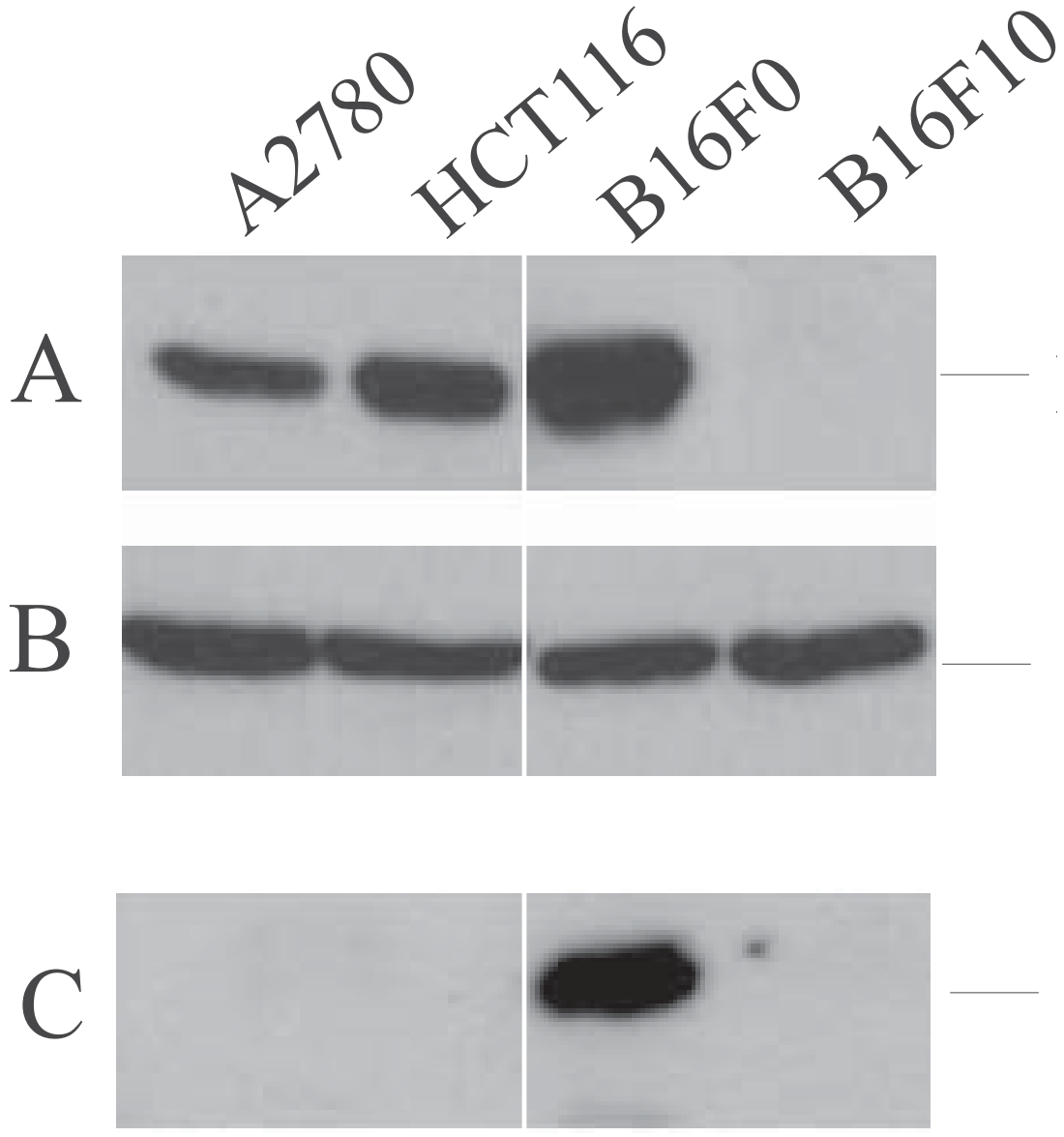


FIGURE 13A, FIGURE 13B

