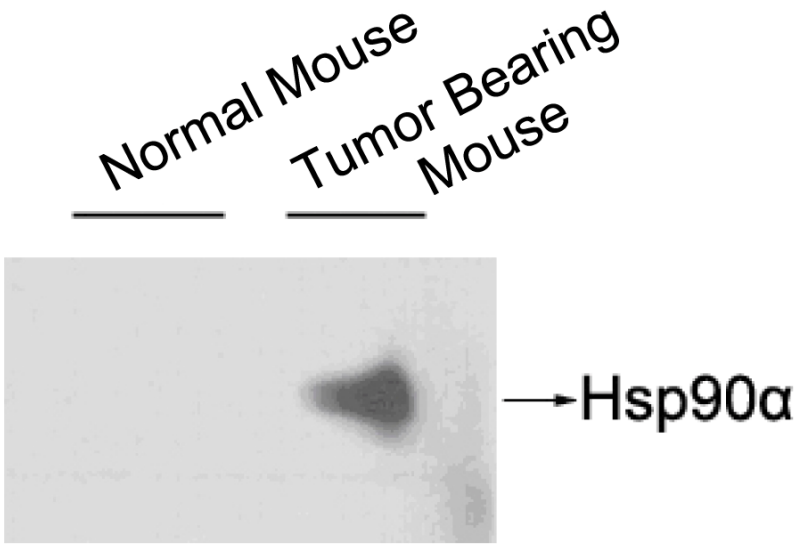

Normal Mouse
Tumor Bearing Mouse
Hsp90α

Fig. 1

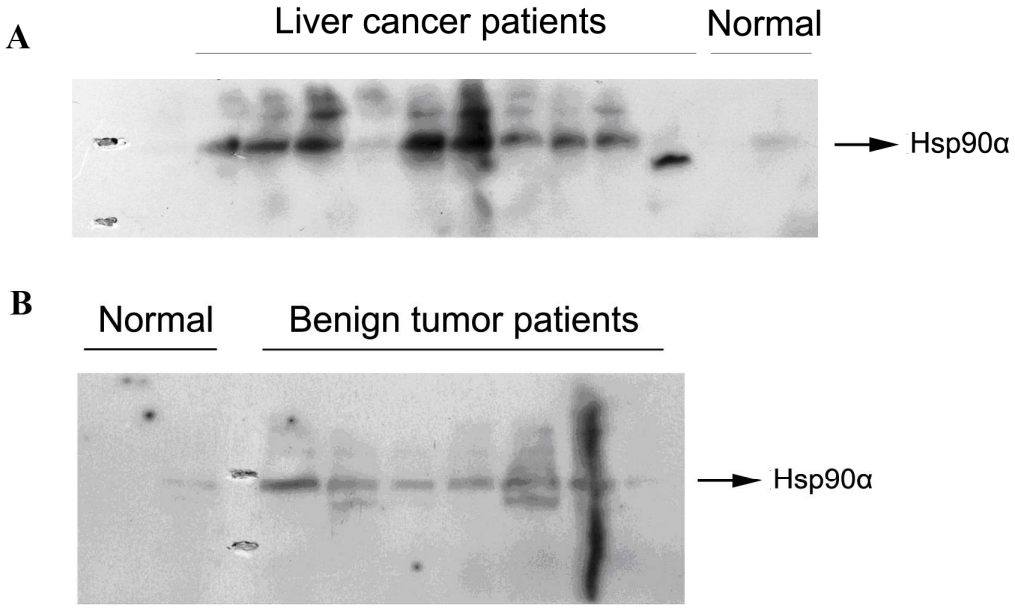

A
Liver cancer patients
Normal
Hsp90α
B
Normal
Benign tumor patients
Hsp90α

Fig. 2

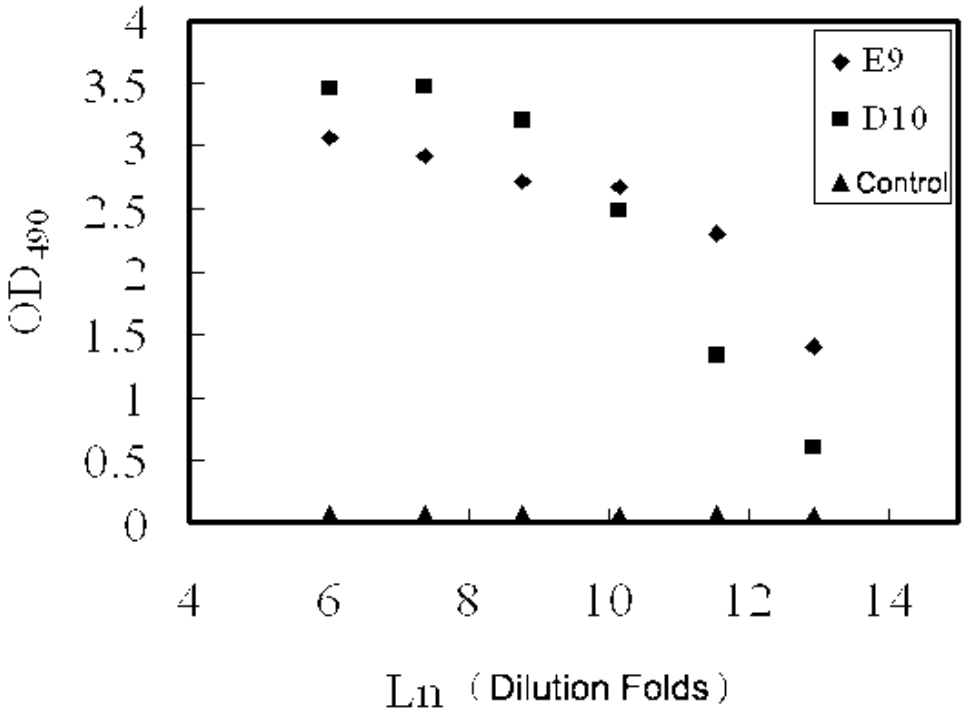

4
3.5
3
2.5
2
1.5
1
0.5
0
OD490
E9
D10
Control
4
6
8
10
12
14
Ln（Dilution Folds）

Fig. 3

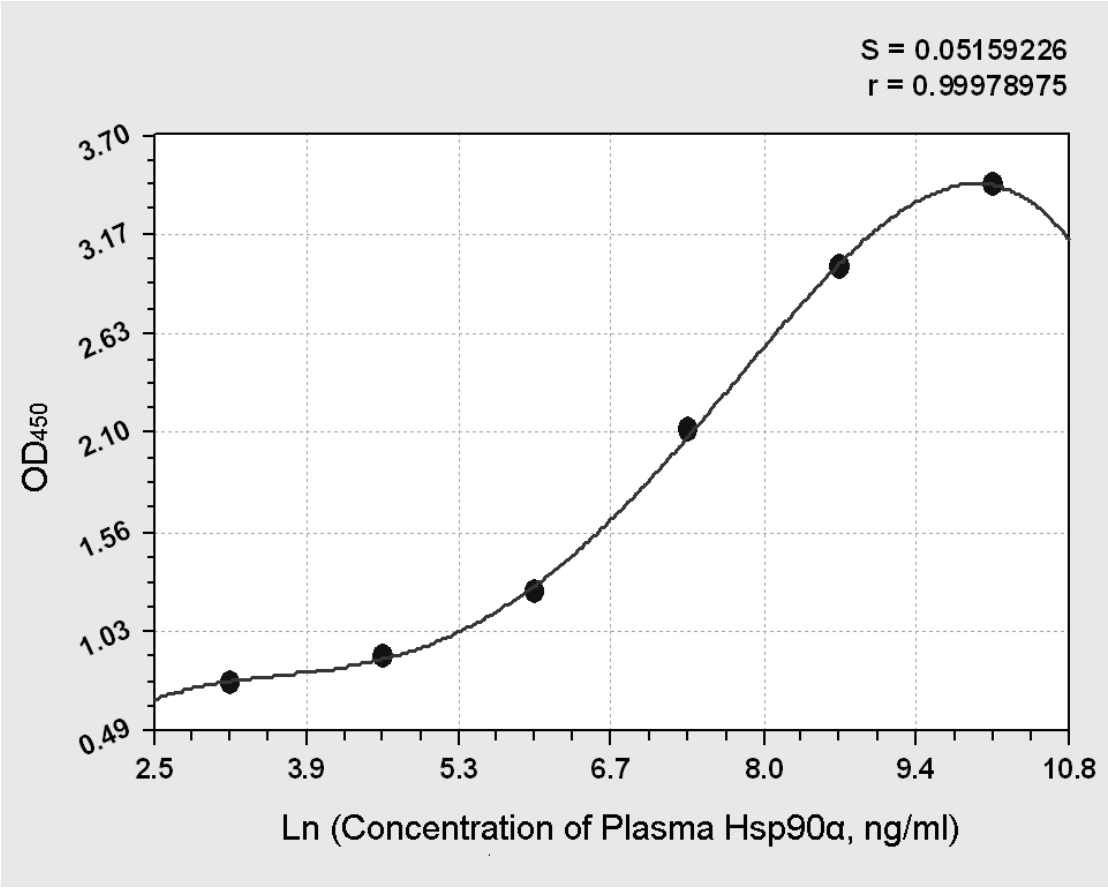

S = 0.05159226
r = 0.99978975
3.70
3.17
2.63
2.10
1.56
1.03
0.49
OD450
2.5
3.9
5.3
6.7
8.0
9.4
10.8
Ln (Concentration of Plasma Hsp90α, ng/ml)

Fig. 4

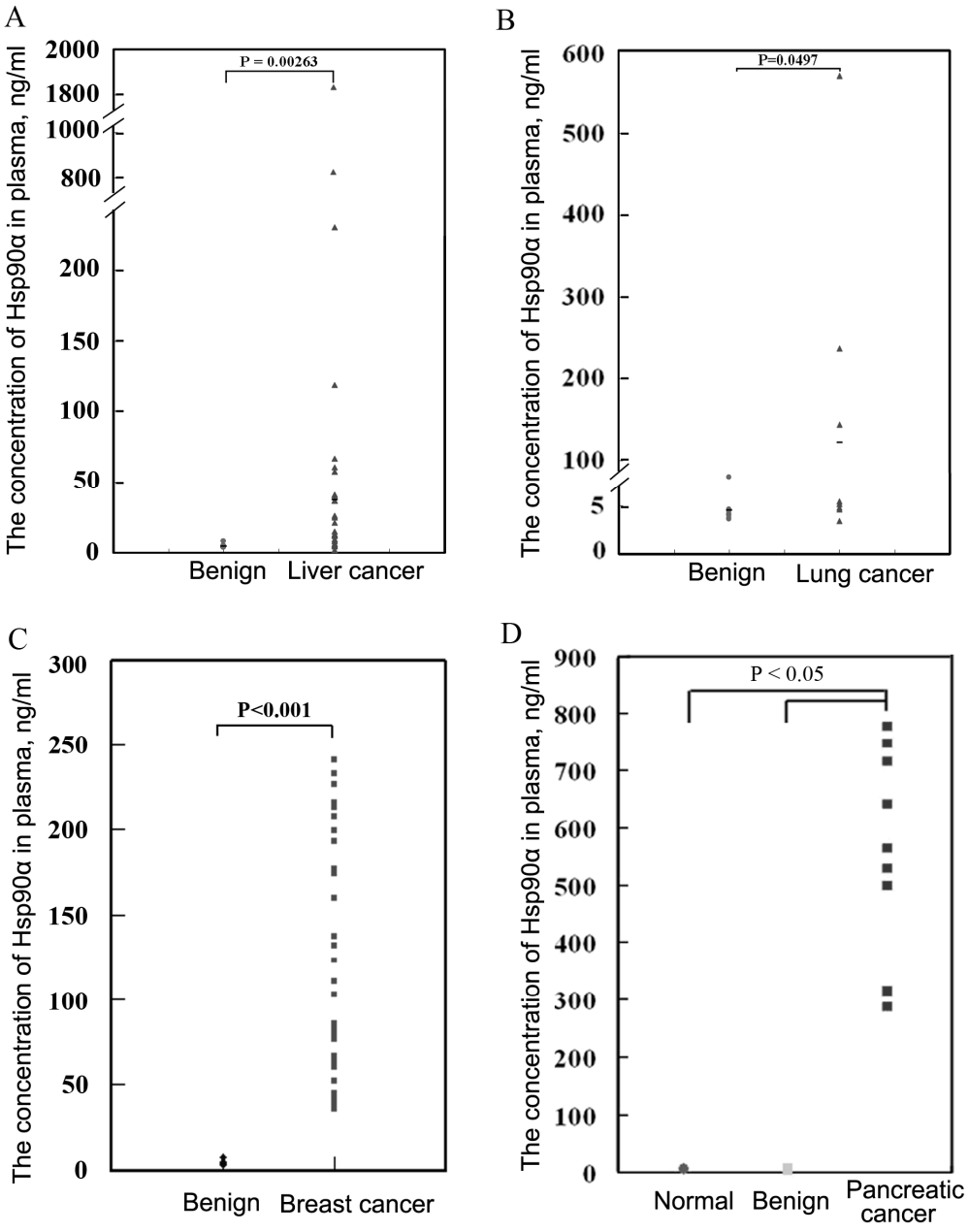

A
The concentration of Hsp90α in plasma, ng/ml
2000
1800
1000
800
200
150
100
50
0
P = 0.00263
Benign
Liver cancer
B
The concentration of Hsp90α in plasma, ng/ml
600
500
400
300
200
100
5
0
P=0.0497
Benign
Lung cancer
C
The concentration of Hsp90α in plasma, ng/ml
300
250
200
150
100
50
0
P<0.001
Benign
Breast cancer
D
The concentration of Hsp90α in plasma, ng/ml
900
800
700
600
500
400
300
200
100
0
P < 0.05
Normal
Benign
Pancreatic cancer

Fig. 5

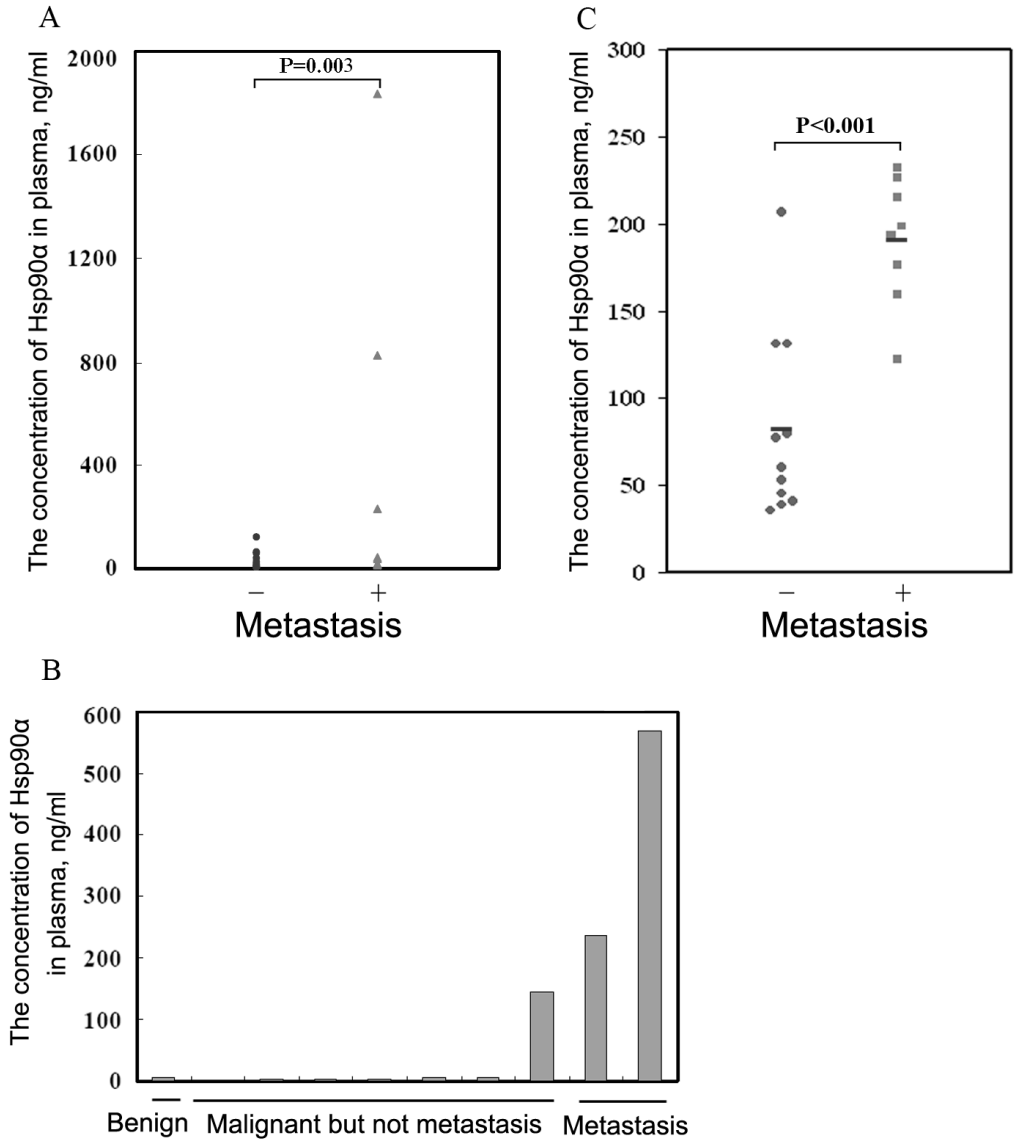

A
The concentration of Hsp90α in plasma, ng/ml
2000
1600
1200
800
400
0
P=0.003
−
+
Metastasis
C
The concentration of Hsp90α in plasma, ng/ml
300
250
200
150
100
50
0
P<0.001
−
+
Metastasis
B
The concentration of Hsp90α in plasma, ng/ml
600
500
400
300
200
100
0
Benign
Malignant but not metastasis
Metastasis

Fig. 6

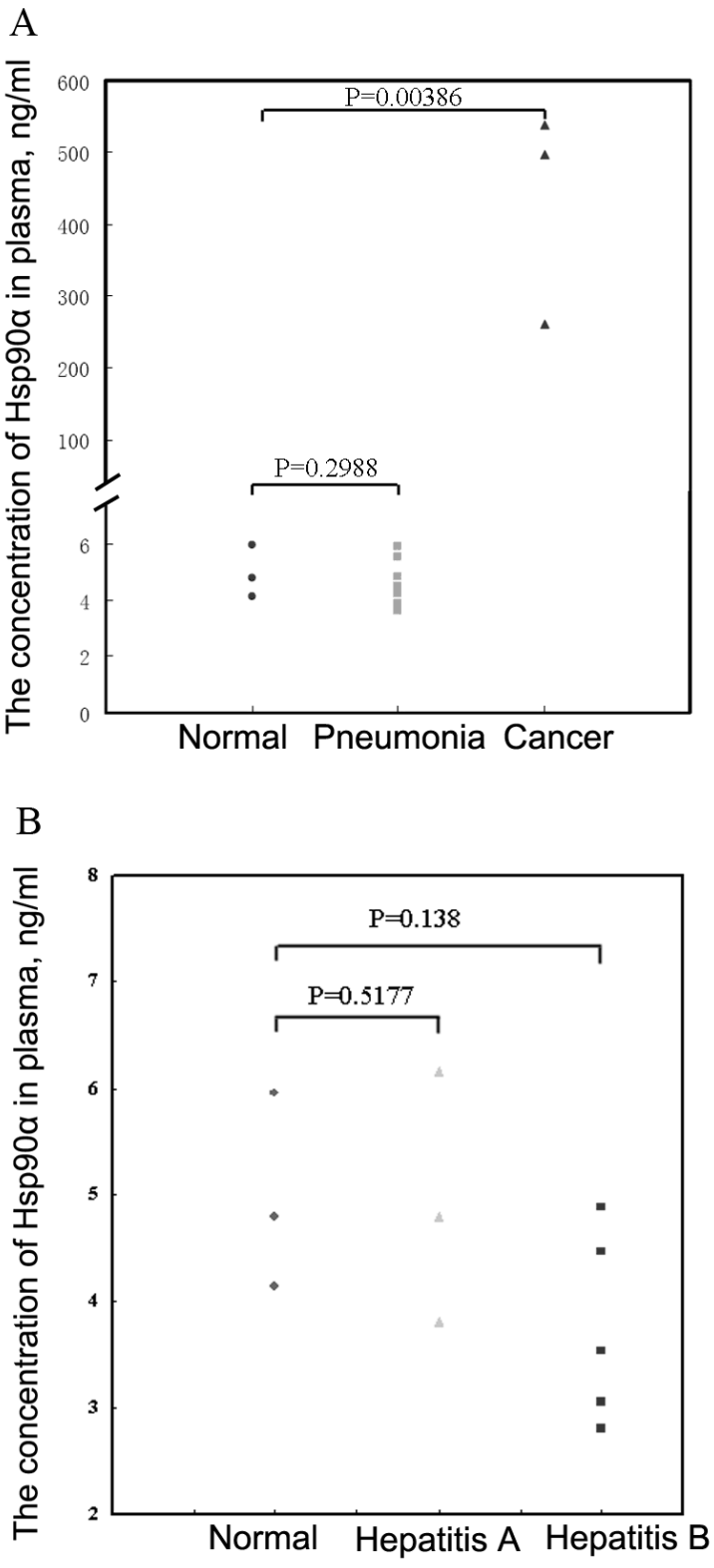

A
The concentration of Hsp90α in plasma, ng/ml
600
500
400
300
200
100
6
4
2
0
P=0.00386
P=0.2988
Normal
Pneumonia
Cancer
B
The concentration of Hsp90α in plasma, ng/ml
8
7
6
5
4
3
2
P=0.138
P=0.5177
Normal
Hepatitis A
Hepatitis B

Fig. 7

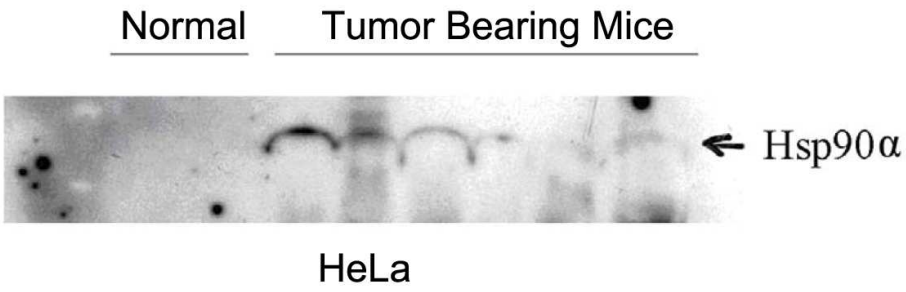


Fig. 8

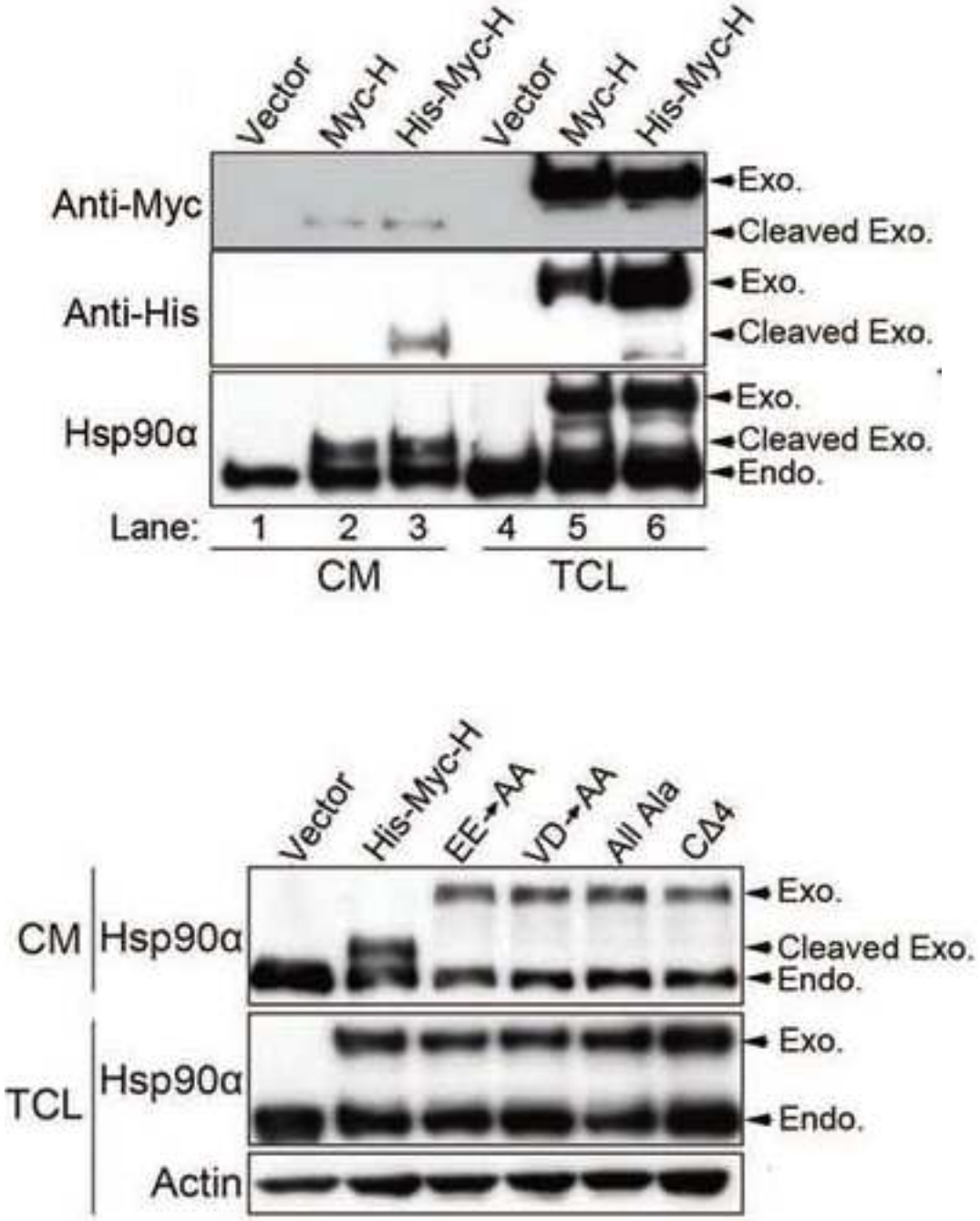

Vector
Myc-H
His-Myc-H
Vector
Myc-H
His-Myc-H
Anti-Myc
Anti-His
Hsp90α
Exo.
Cleaved Exo.
Endo.
Lane: 1 2 3 4 5 6
CM
TCL
Vector
His-Myc-H
EE→AA
VD→AA
All Ala
CΔ4
CM
TCL
Hsp90α
Actin

Fig. 9

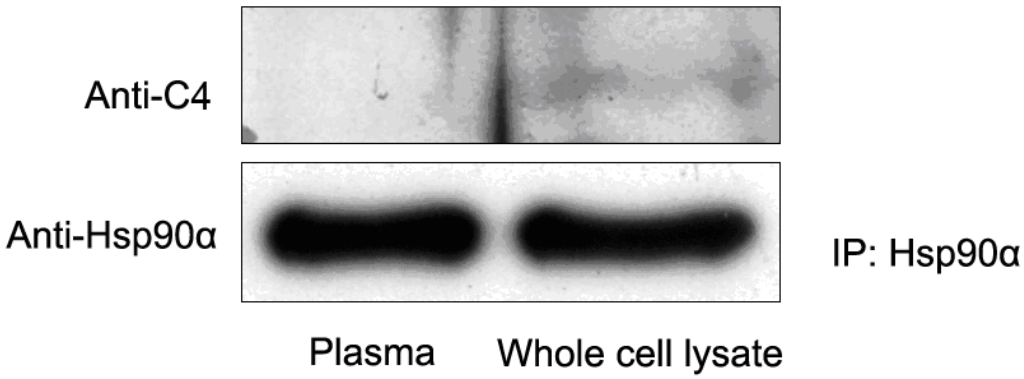

Anti-C4
Anti-Hsp90α
IP: Hsp90α
Plasma
Whole cell lysate

Fig. 10

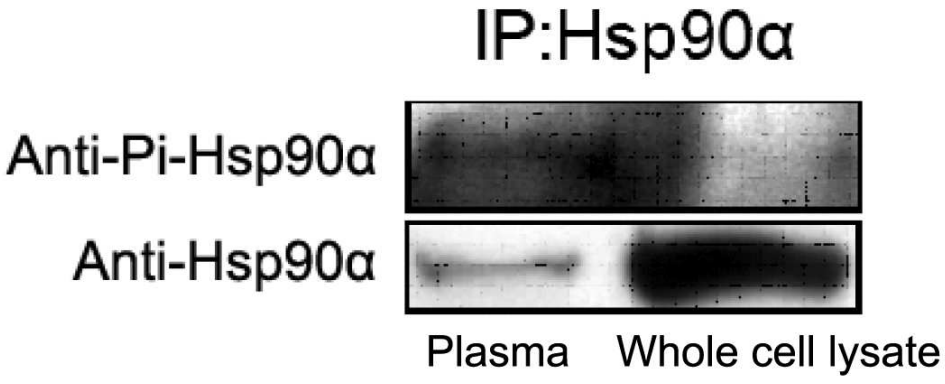

IP:Hsp90α
Anti-Pi-Hsp90α
Anti-Hsp90α
Plasma
Whole cell lysate

Fig. 11

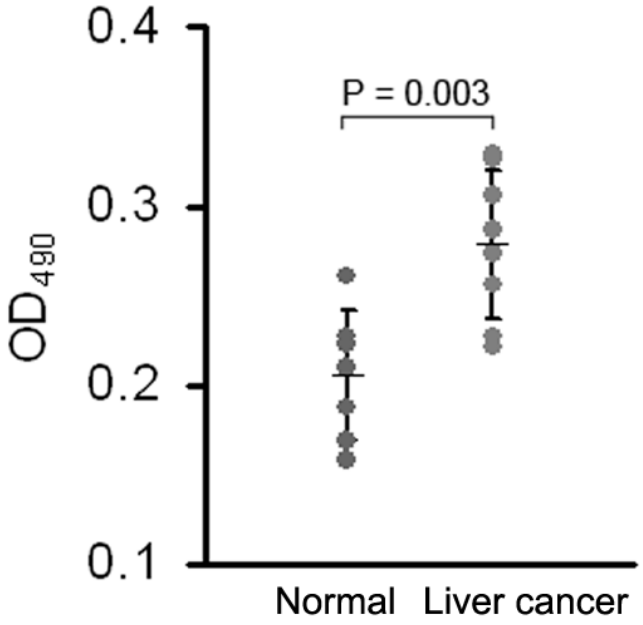

0.4
0.3
0.2
0.1
OD490
P = 0.003
Normal
Liver cancer

Fig. 12

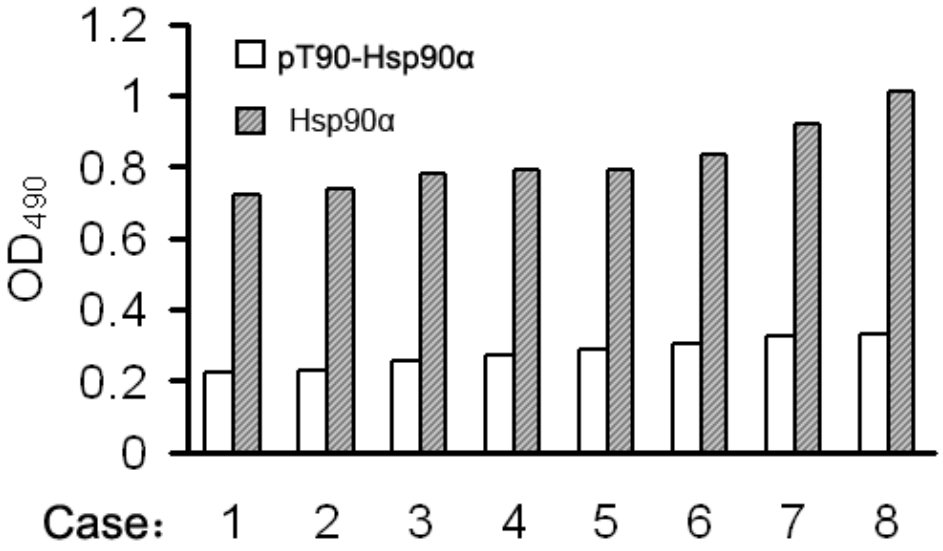

1.2
1
0.8
0.6
0.4
0.2
0
OD490
pT90-Hsp90α
Hsp90α
Case: 1 2 3 4 5 6 7 8

Fig. 13

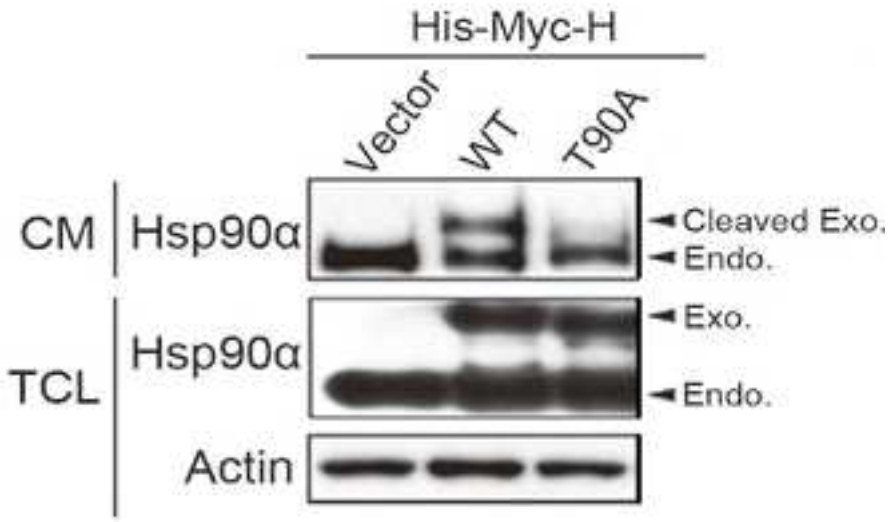

His-Myc-H
Vector
WT
T90A
CM
Hsp90α
Cleaved Exo.
Endo.
TCL
Hsp90α
Exo.
Endo.
Actin

Fig. 14

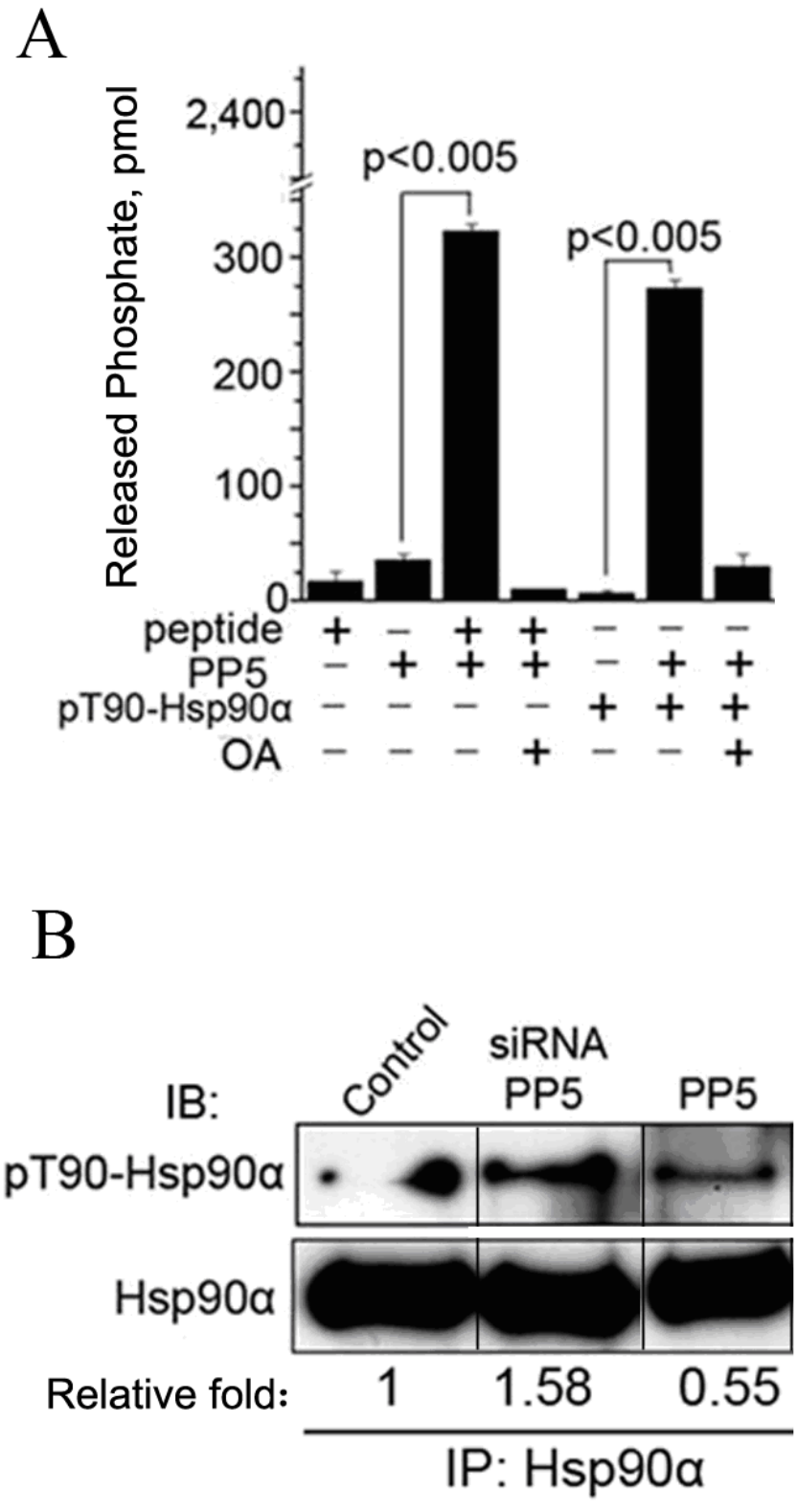

A
Released Phosphate, pmol
2,400
300
200
100
0
p<0.005
p<0.005
peptide + − + + − − −
PP5 − + + + − + +
pT90-Hsp90α − − − − + + +
OA − − − + − − +
B
IB:
Control
siRNA PP5
PP5
pT90-Hsp90α
Hsp90α
Relative fold: 1 1.58 0.55
IP: Hsp90α

Fig. 15

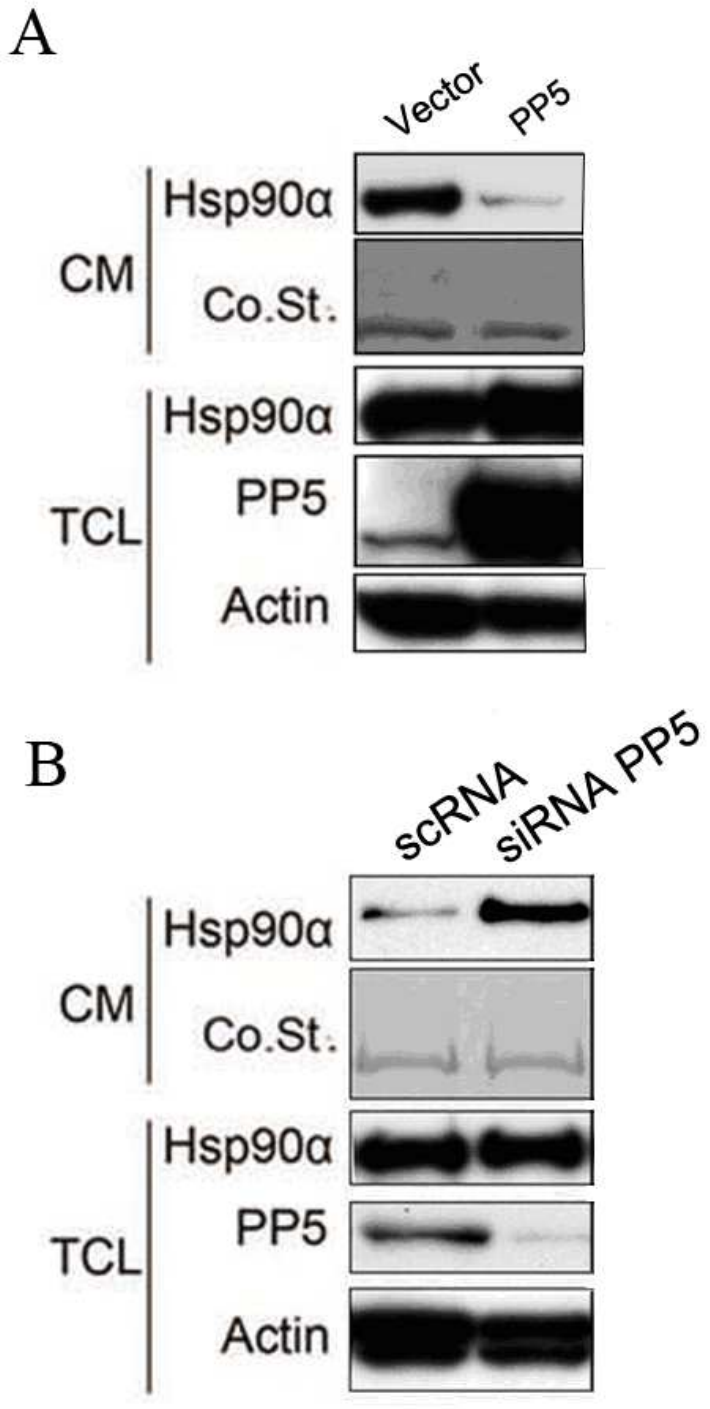

A
Vector
PP5
CM
Hsp90α
Co.St.
TCL
Hsp90α
PP5
Actin
B
scRNA
siRNA PP5
CM
Hsp90α
Co.St.
TCL
Hsp90α
PP5
Actin

Fig. 16

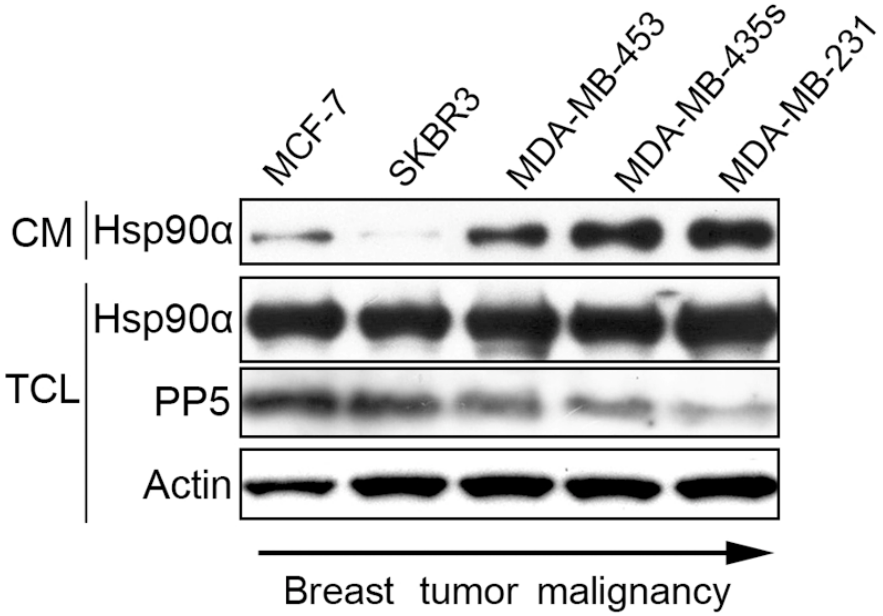

MCF-7
SKBR3
MDA-MB-453
MDA-MB-435s
MDA-MB-231
CM
Hsp90α
TCL
Hsp90α
PP5
Actin
Breast tumor malignancy

Fig. 17

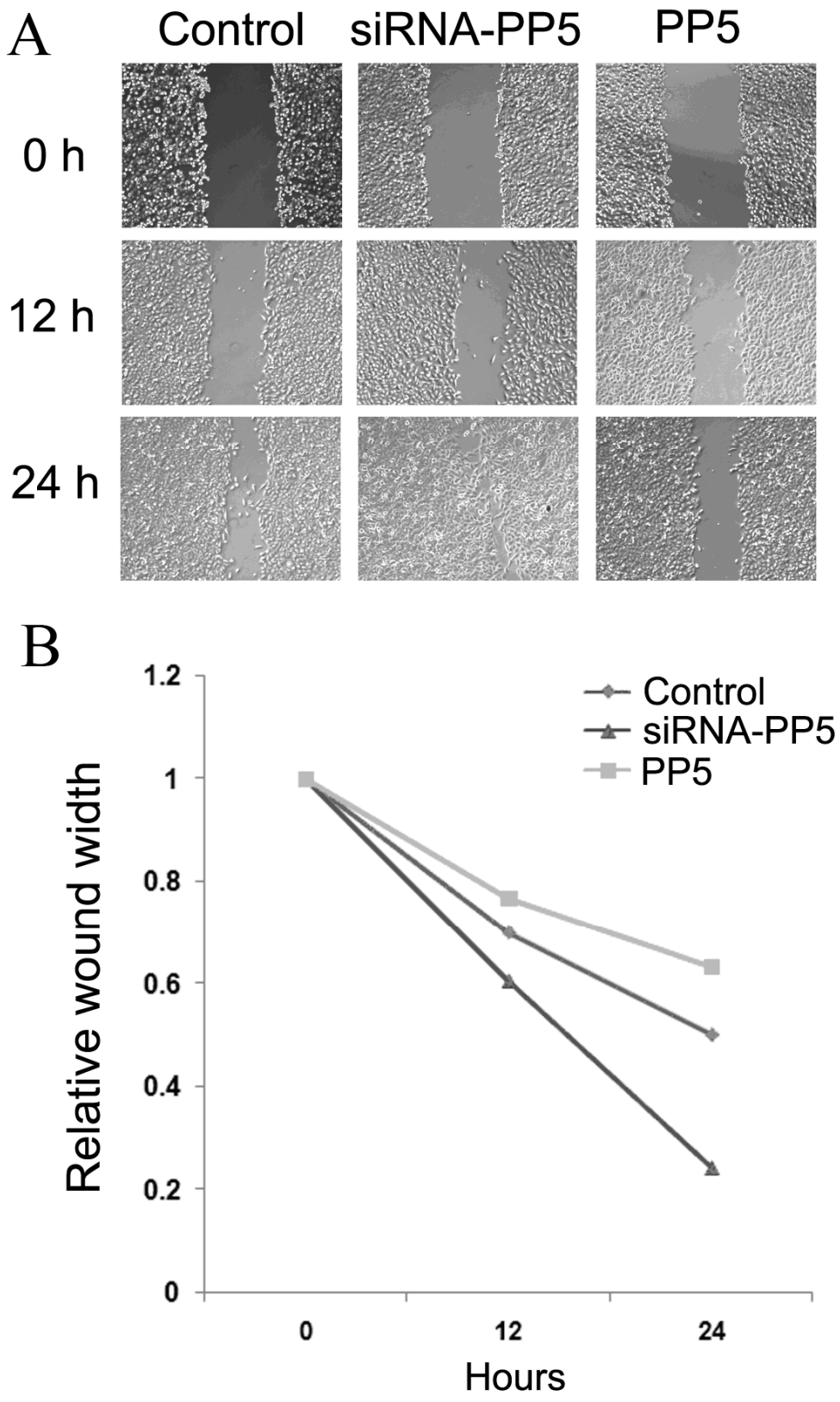
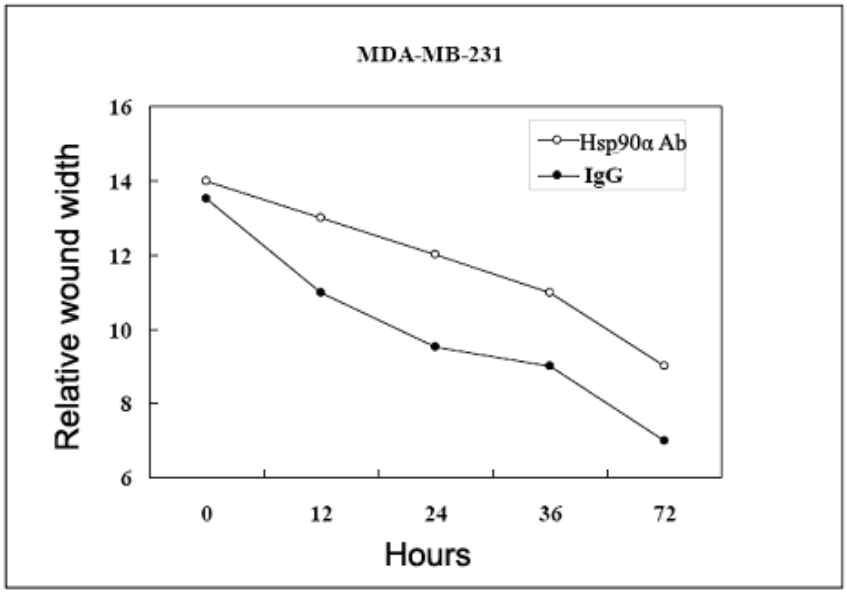

A
Control
siRNA-PP5
PP5
0 h
12 h
24 h
B
Relative wound width
1.2
1
0.8
0.6
0.4
0.2
0
0
12
24
Hours
Control
siRNA-PP5
PP5

Fig. 18

A


MDA-MB-231
Relative wound width
16
14
12
10
8
6
0
12
24
36
72
Hours
Hsp90α Ab
IgG

B

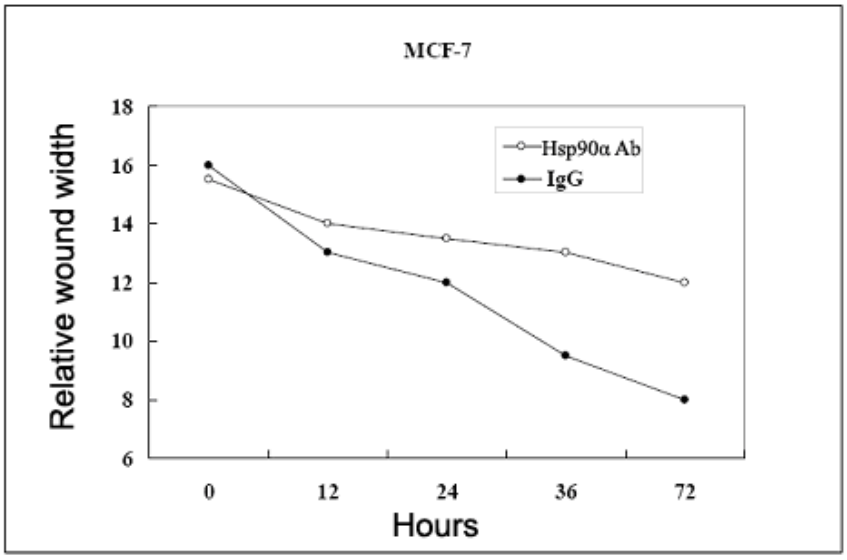
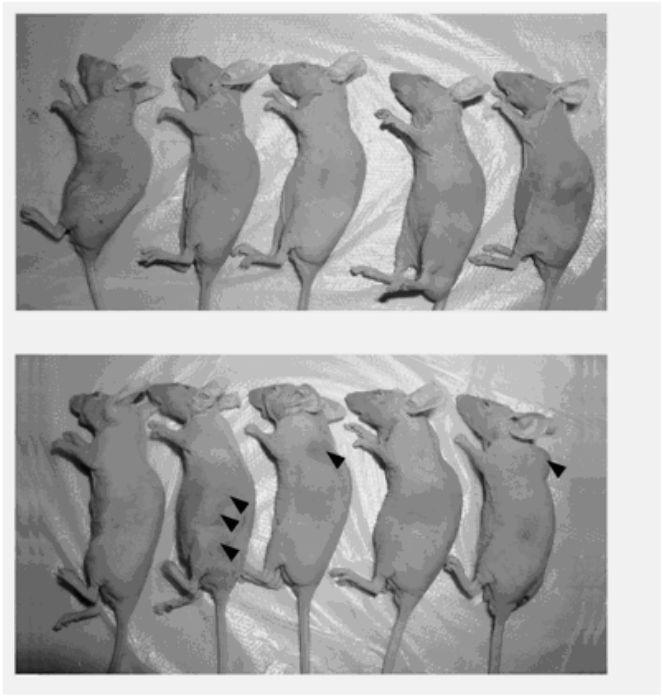

MCF-7
Relative wound width
18
16
14
12
10
8
6
0
12
24
36
72
Hours
Hsp90α Ab
IgG

Fig. 19

A



B

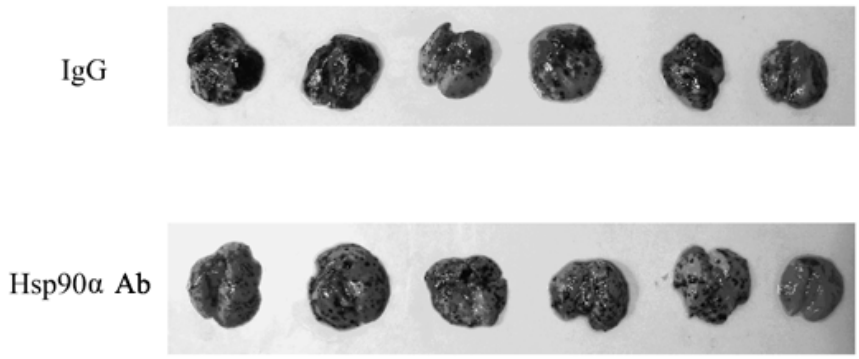


Fig. 20