Figure 1

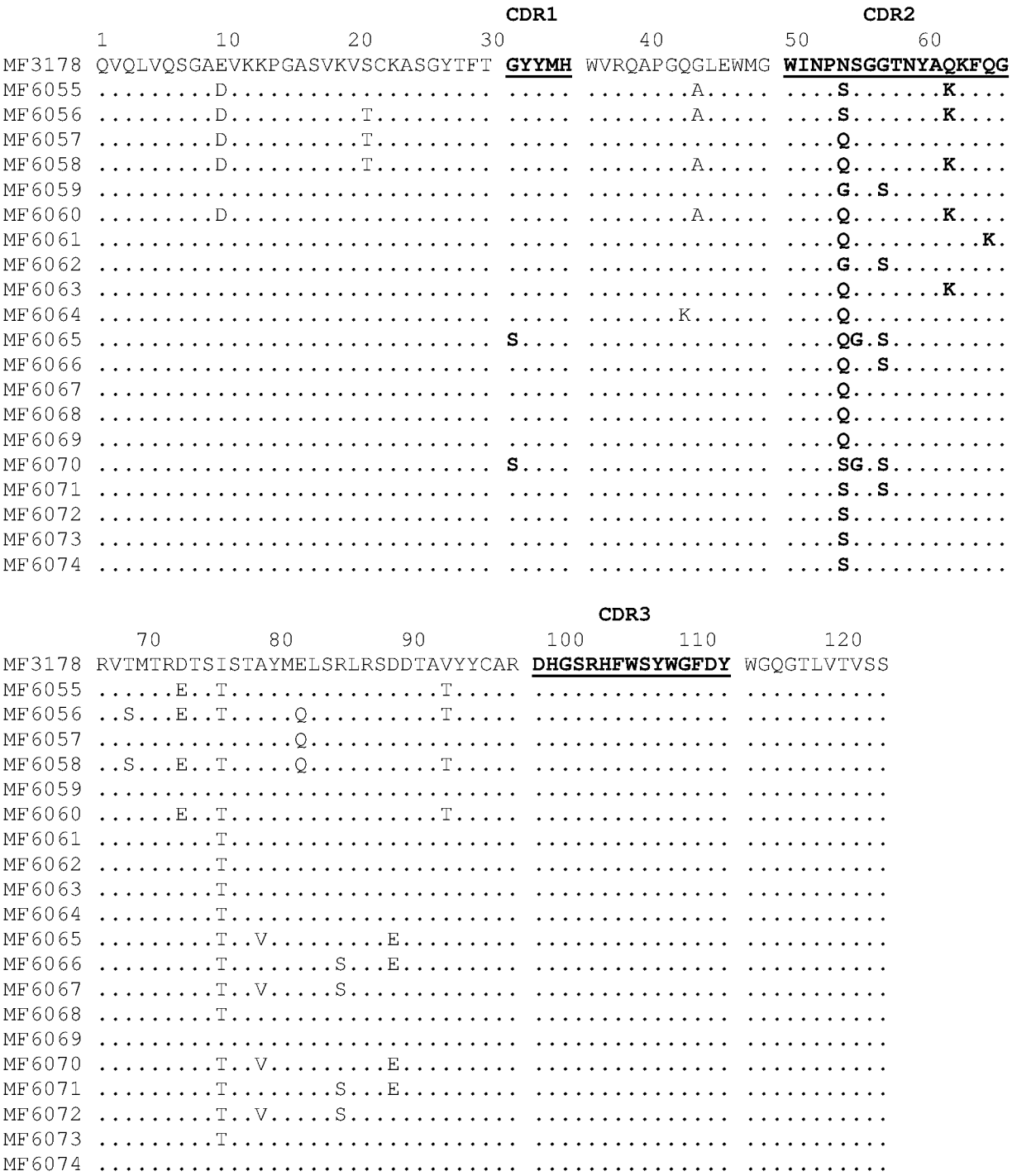
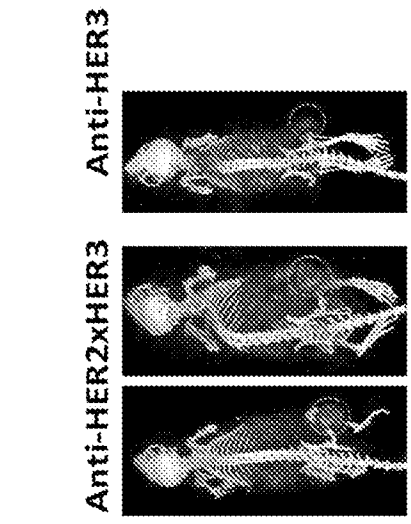

CDR1
CDR2
CDR3
1 10 20 30 40 50 60
70 80 90 100 110 120
MF3178 QVQLVQSGAEVKKPGASVKVSCKASGYTFT GYYMH WVRQAPGQGLEWMG WINPNSGGTNYAQKFQG
MF3178 RVTMTRDTSISTAYMELSRLRSDDTAVYYCAR DHGSRHFWSYWGFDY WGQGTLVTVSS
MF6055 MF6056 MF6057 MF6058 MF6059 MF6060 MF6061 MF6062 MF6063 MF6064 MF6065 MF6066 MF6067 MF6068 MF6069 MF6070 MF6071 MF6072 MF6073 MF6074

Fig. 2


A
Anti-HER2xHER3
Anti-HER3

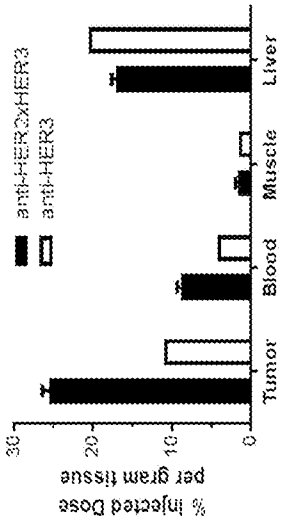

B
% Injected Dose
per gram tissue
30
20
10
0
anti-HER2xHER3
anti-HER3
Tumor
Blood
Muscle
Liver

Fig 2. continued

C.

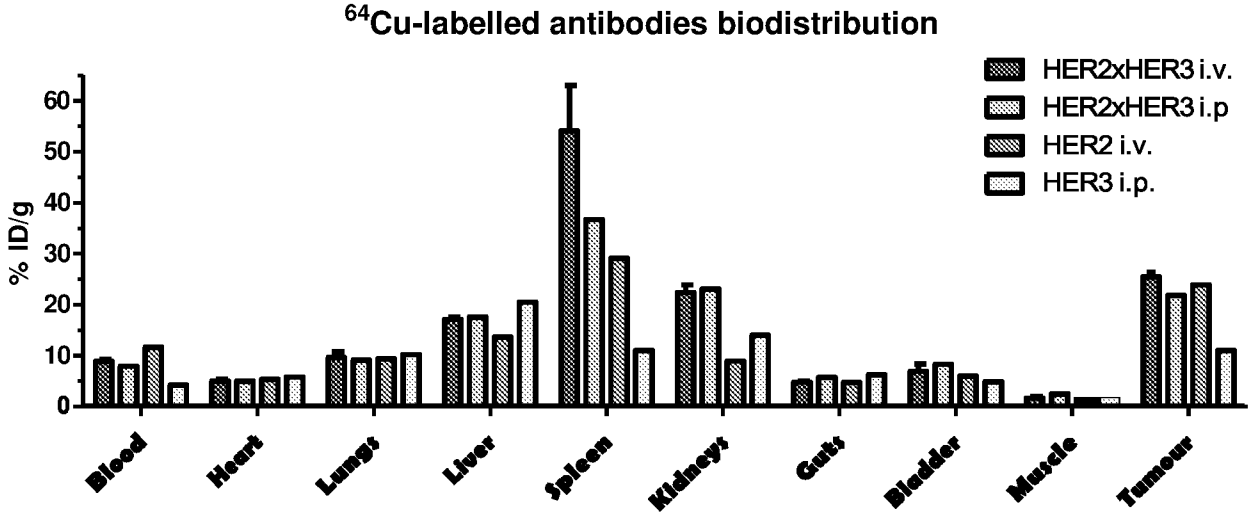


Figure 3

A

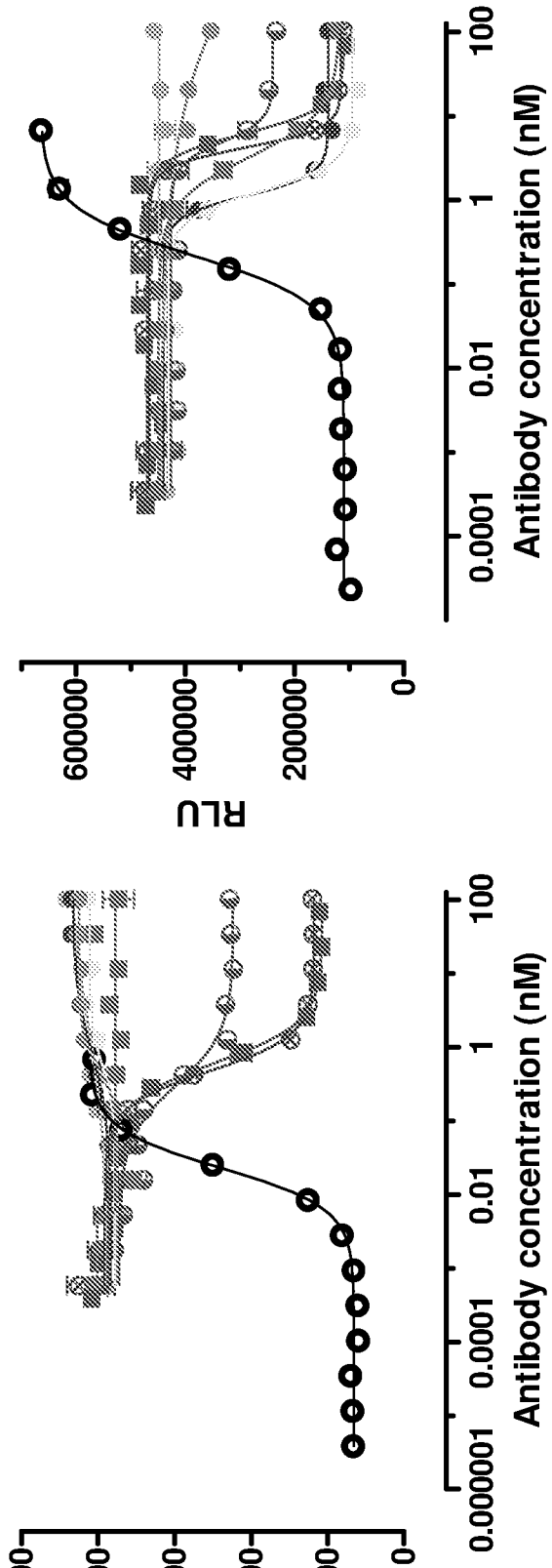
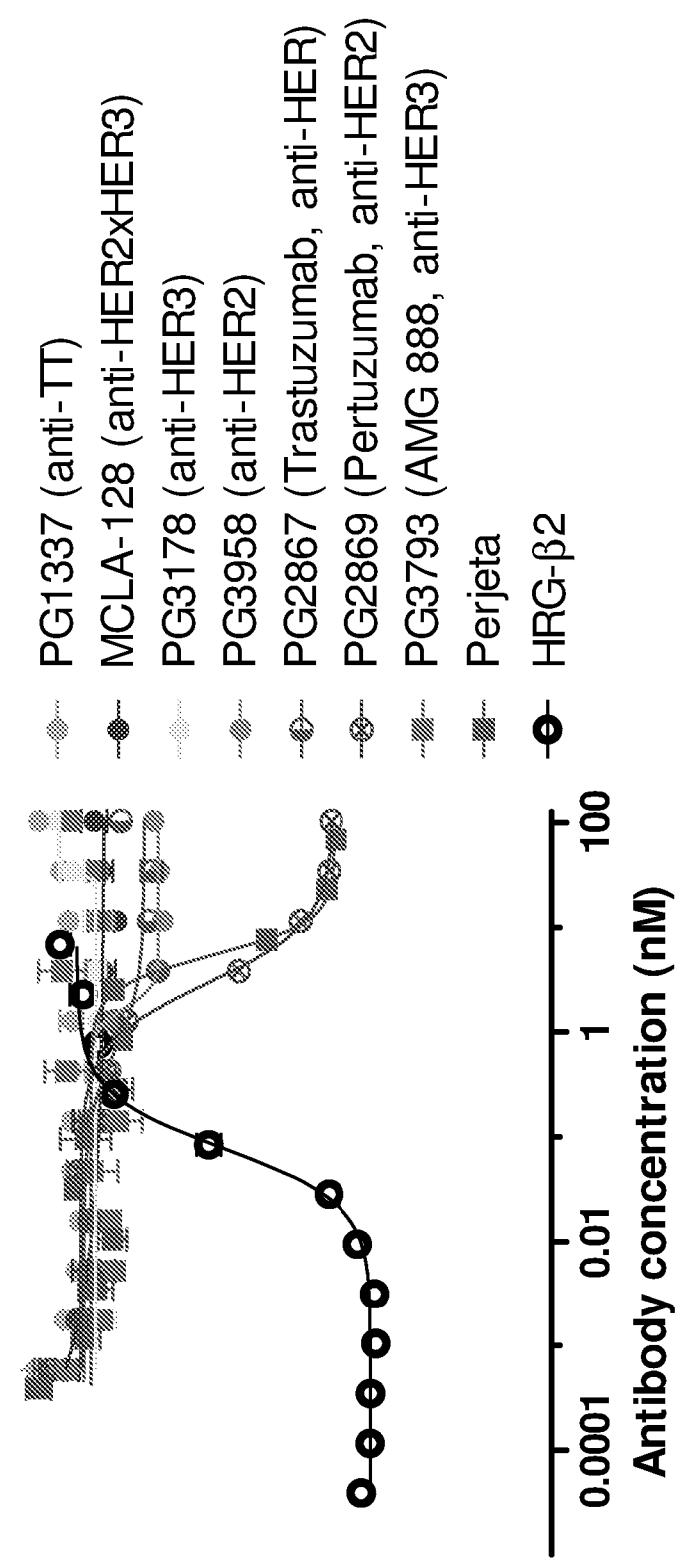

EGFR/HER2 heterodimer formation
RLU
500000
400000
300000
200000
100000
0
0.000001
0.0001
0.01
1
100
Antibody concentration (nM)
HER2/HER3 heterodimer formation
RLU
600000
400000
200000
0
0.0001
0.01
1
100
Antibody concentration (nM)

Figure 3

B


HER2/HER4 heterodimer formation
RLU
800000
600000
400000
200000
0
0.0001
0.01
1
100
Antibody concentration (nM)
PG1337 (anti-TT)
MCLA-128 (anti-HER2xHER3)
PG3178 (anti-HER3)
PG3958 (anti-HER2)
PG2867 (Trastuzumab, anti-HER)
PG2869 (Pertuzumab, anti-HER2)
PG3793 (AMG 888, anti-HER3)
Perjeta
HRG-β2

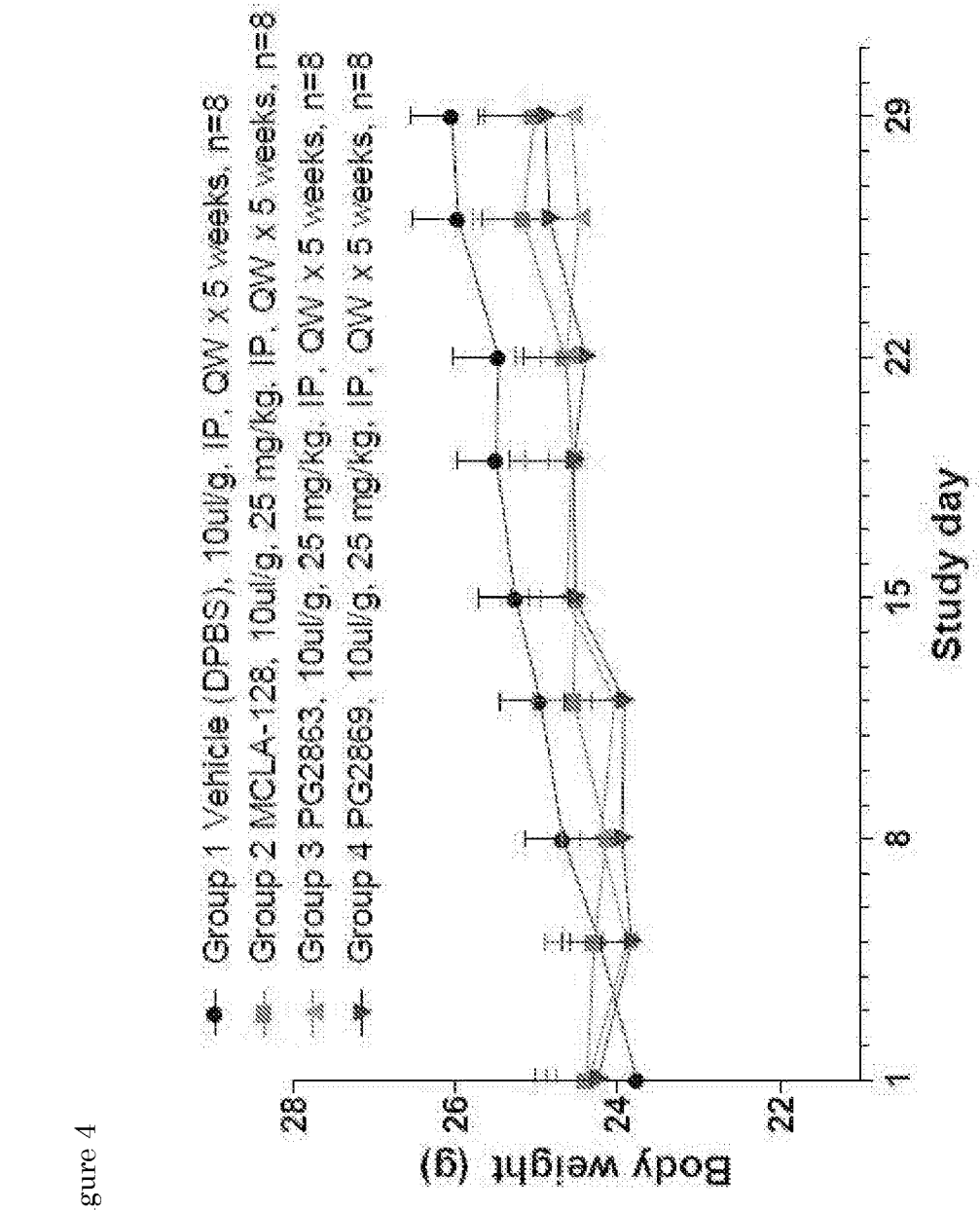

Group 1 Vehicle (DPBS), 10ul/g, IP, QW x 5 weeks, n=8
Group 2 MCLA-128, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Group 3 PG2863, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Group 4 PG2869, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Body weight (g)
28
26
24
22
1
8
15
22
29
Study day

Figure 4

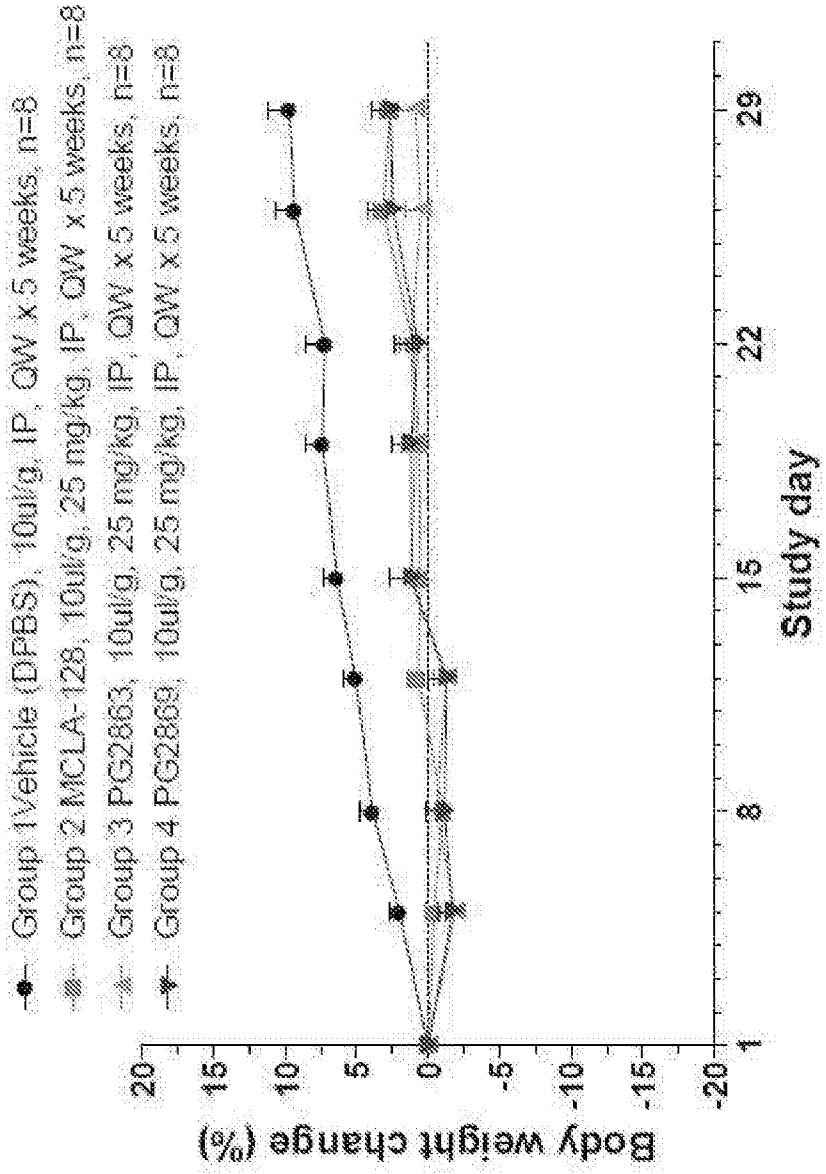
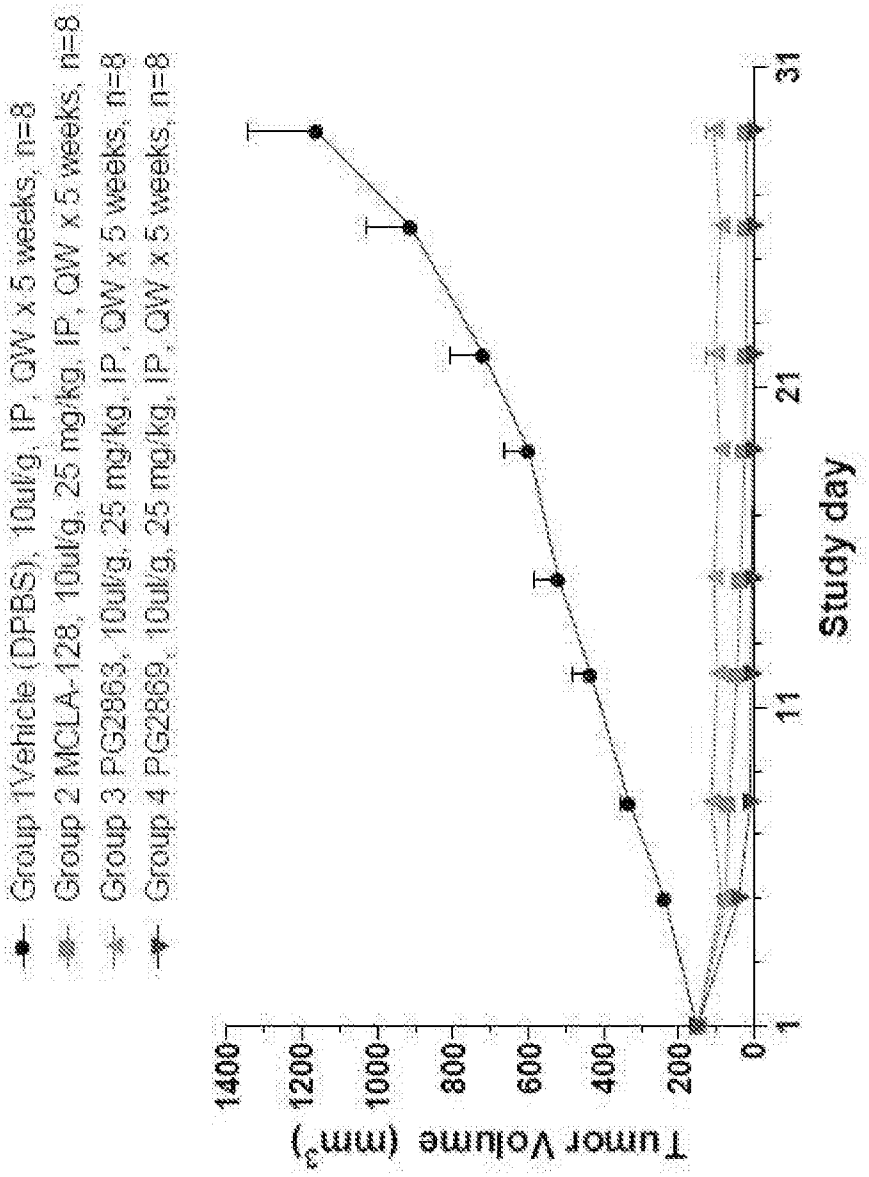
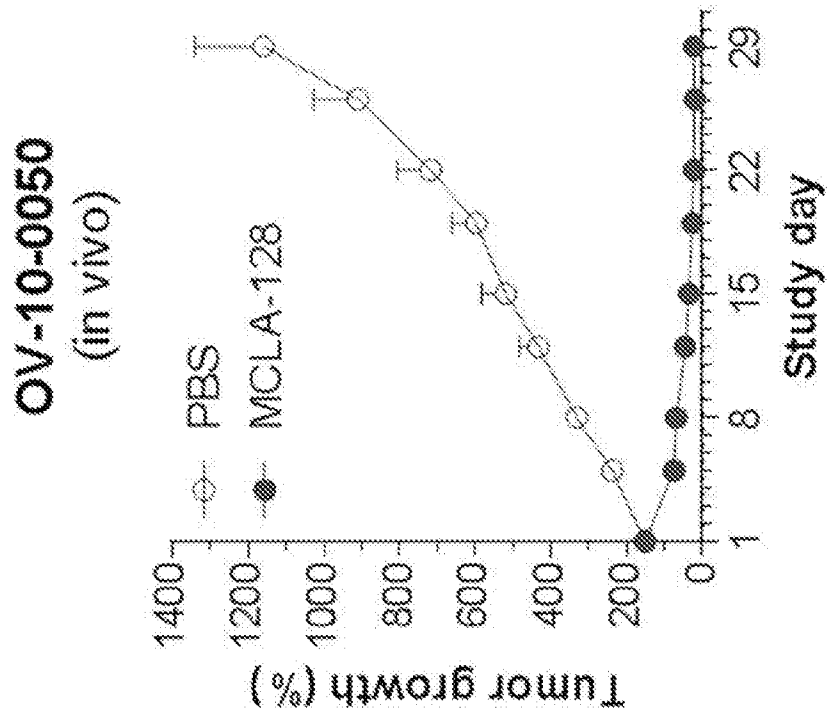

Group 1Vehicle (DPBS), 10ul/g, IP, QW x 5 weeks, n=8
Group 2 MCLA-128, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Group 3 PG2863, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Group 4 PG2869, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Body weight change (%)
20
15
10
5
0
-5
-10
-15
-20
1
8
15
22
29
Study day

Figure 5

Figure 6


Group 1Vehicle (DPBS), 10ul/g, IP, QW x 5 weeks, n=8
Group 2 MCLA-128, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Group 3 PG2863, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Group 4 PG2869, 10ul/g, 25 mg/kg, IP, QW x 5 weeks, n=8
Tumor Volume (mm3)
1400
1200
1000
800
600
400
200
0
1
11
21
31
Study day


OV-10-0050
(in vivo)
PBS
MCLA-128
Tumor growth (%)
1400
1200
1000
800
600
400
200
0
1
8
15
22
29
Study day

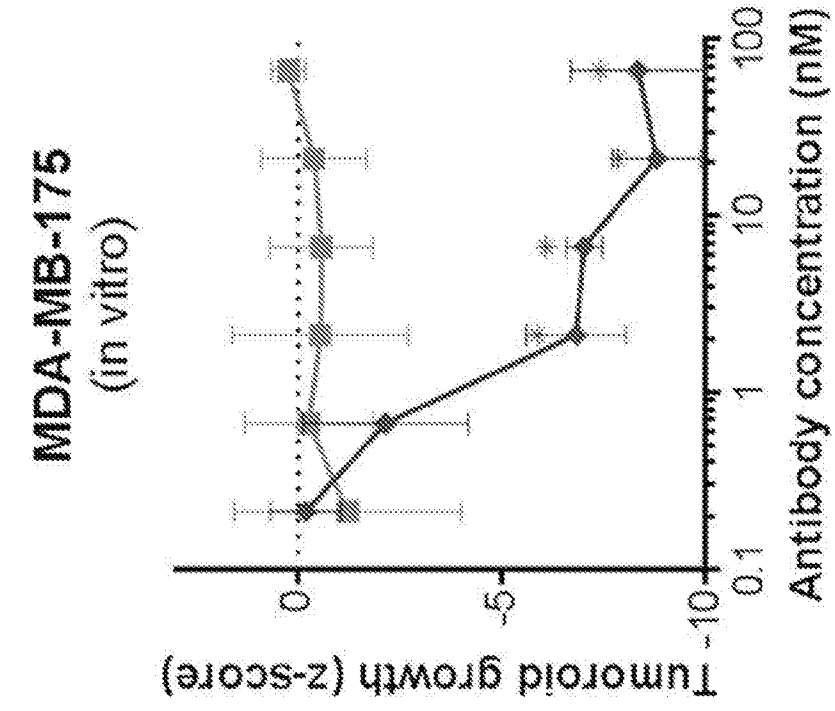

MDA-MB-175
(in vitro)
Tumoroid growth (z-score)
0
-5
-10
0.1
1
10
100
Antibody concentration (nM)

Figure 7