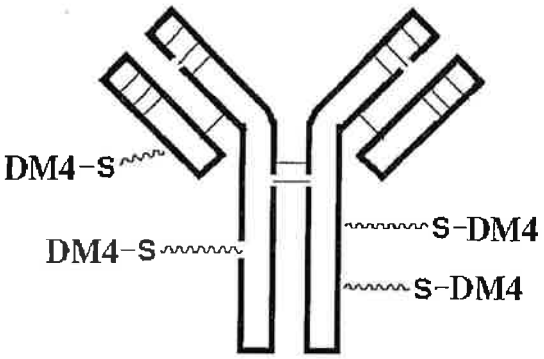
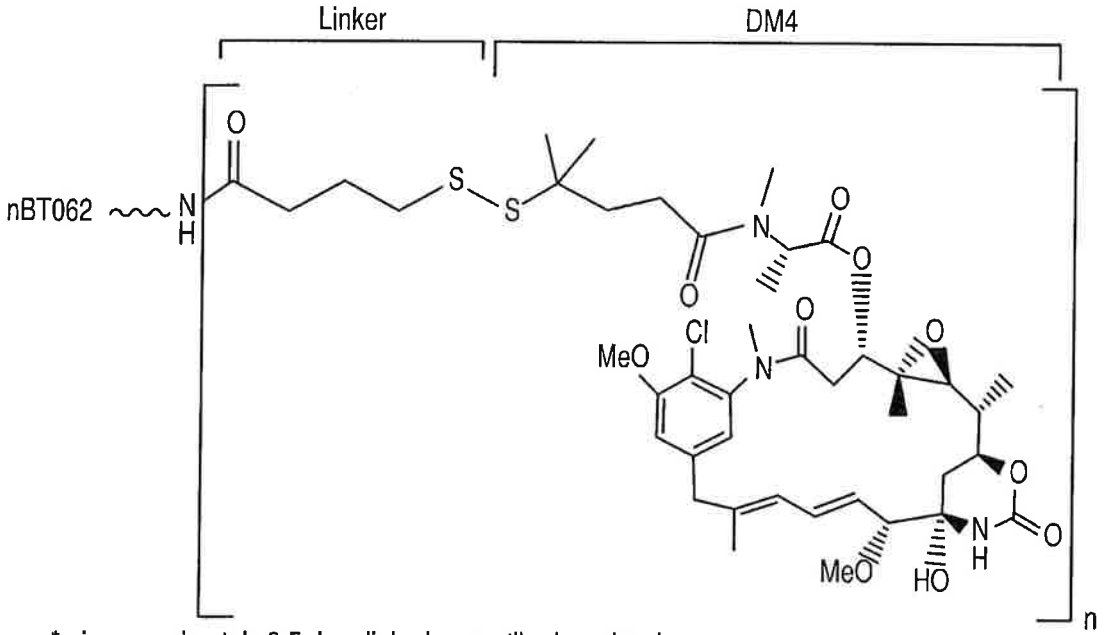
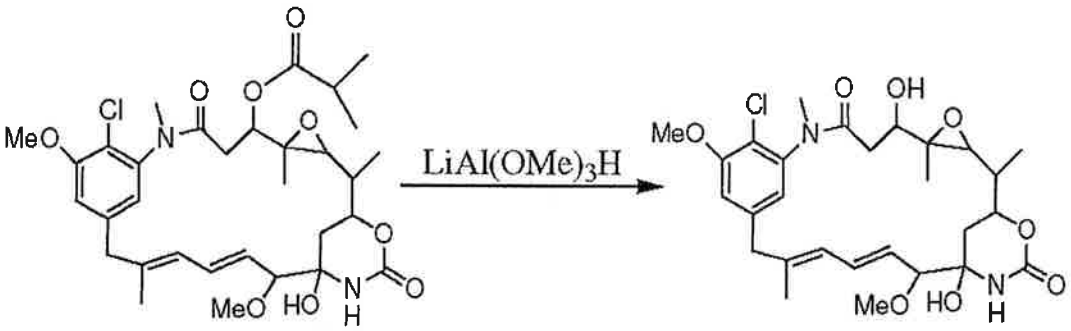
FIG. 1





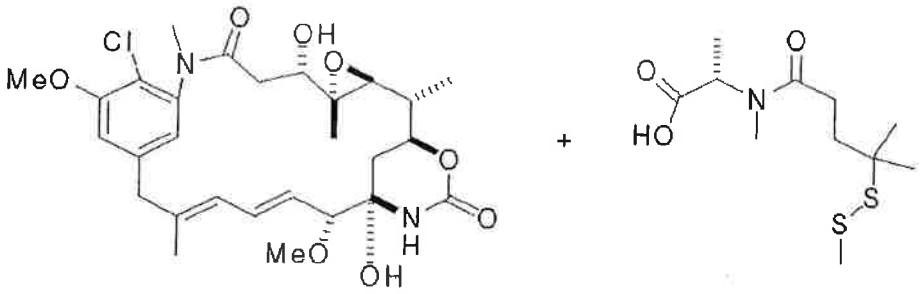
*n is approximately 3.5 drug linked per antibody molecule

FIG. 2



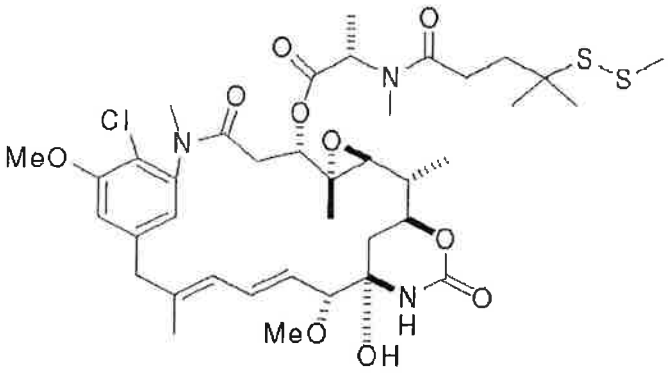
Ansamitocin P-3 Maytansinol

FIG. 3



Maytansinol + DM4 Side Chain

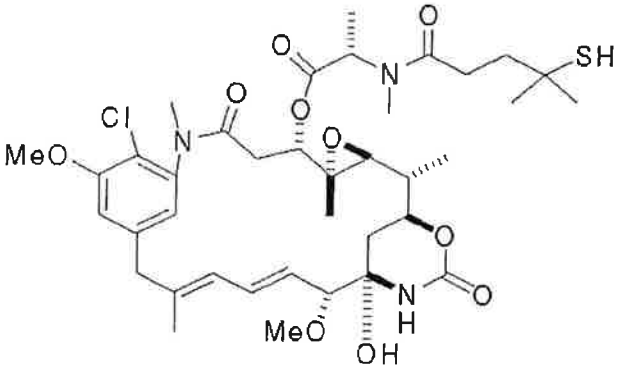
Step I: 1) DCC, $ZnCl_2$, CH_2Cl_2; 2) Chromatography



L-DM4-SMe

FIG. 4

Step II: 1) DTT, DME, phosphate buffer; 2) Chromatography



L-DM4

DCC: 1,3-dicyclohexylcarbodiimide
DTT: Dithiothreitol
DME: 1,2-Dimethoxyethane

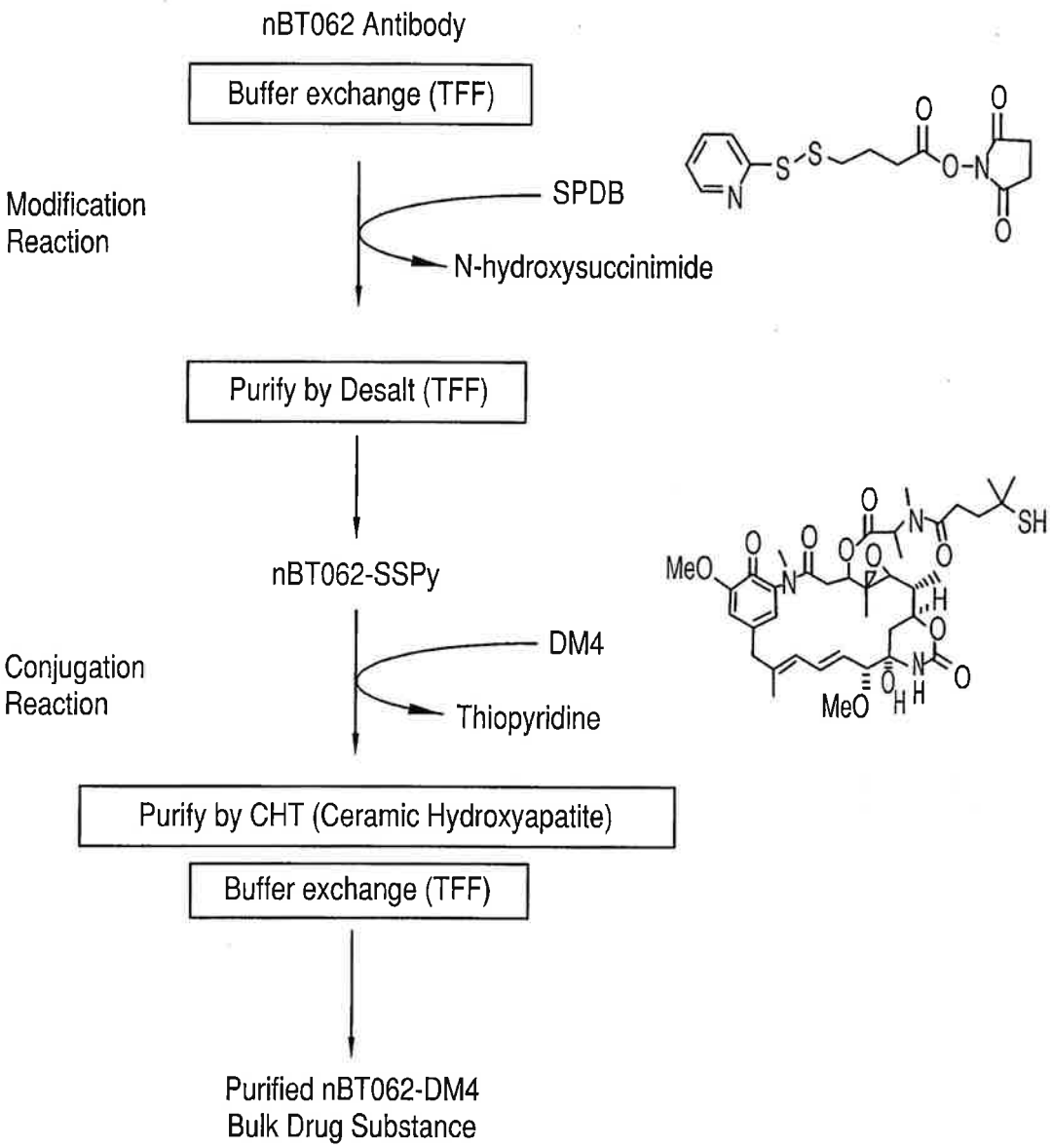

nBT062 Antibody
Buffer exchange (TFF)
Modification Reaction
SPDB
N-hydroxysuccinimide
Purify by Desalt (TFF)
nBT062-SSPy
Conjugation Reaction
DM4
Thiopyridine
Purify by CHT (Ceramic Hydroxyapatite)
Buffer exchange (TFF)
Purified nBT062-DM4
Bulk Drug Substance

FIG. 5

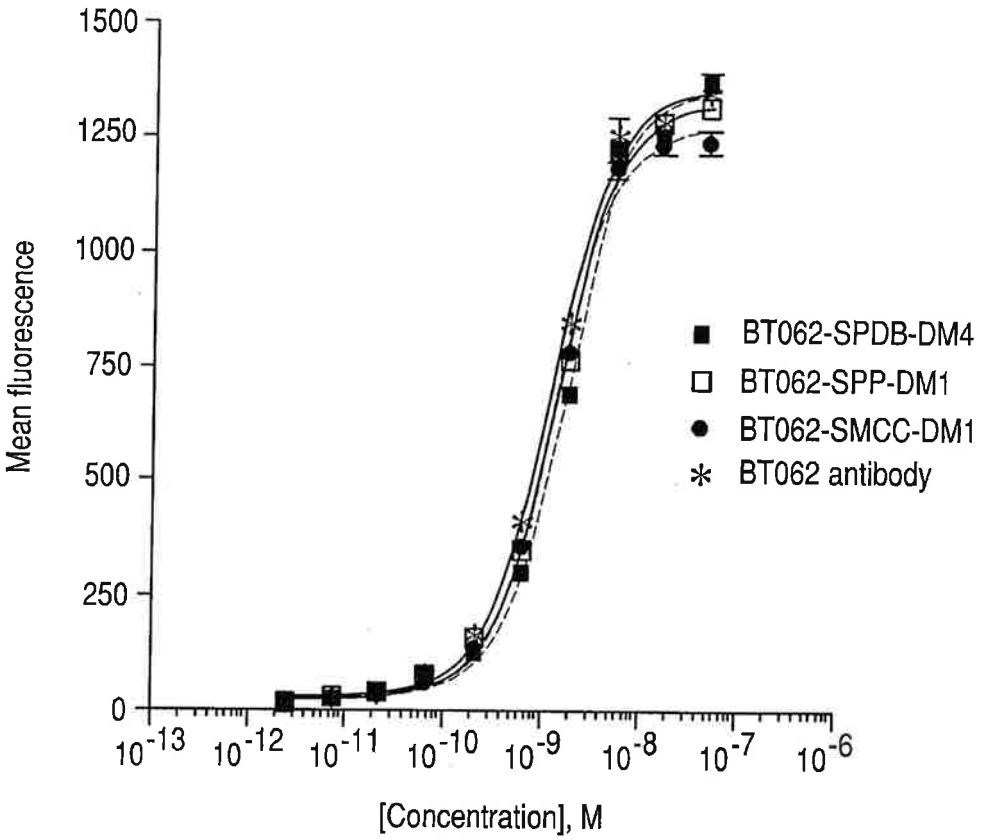

1500
1250
1000
750
500
250
0
Mean fluorescence
10-13
10-12
10-11
10-10
10-9
10-8
10-7
10-6
[Concentration], M
BT062-SPDB-DM4
BT062-SPP-DM1
BT062-SMCC-DM1
BT062 antibody

FIG. 6

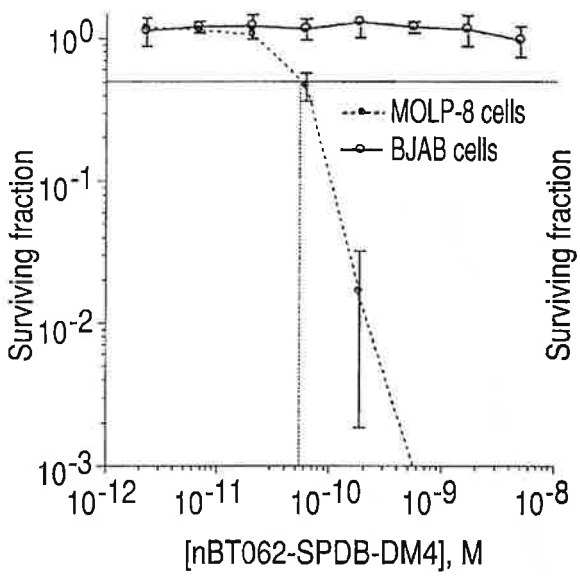


FIG. 7A

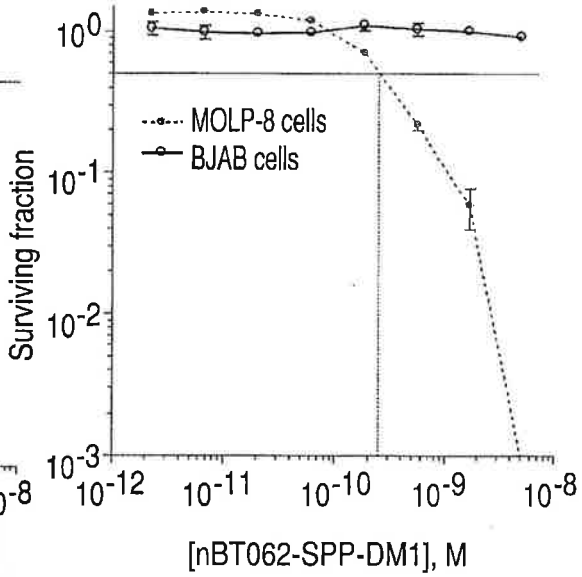


FIG. 7B

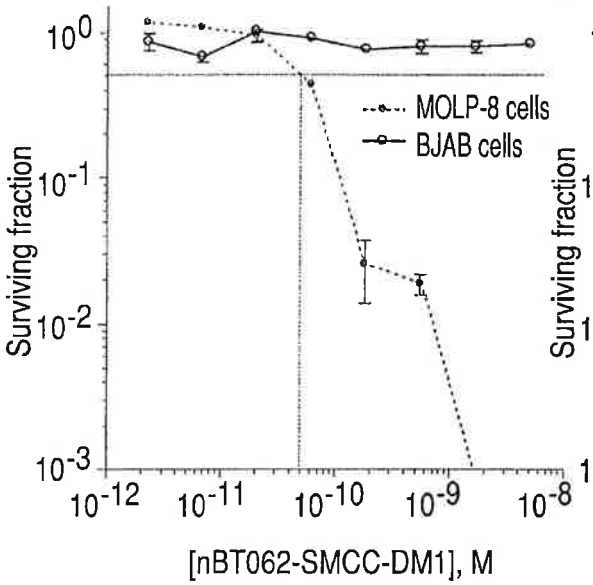


FIG. 7C

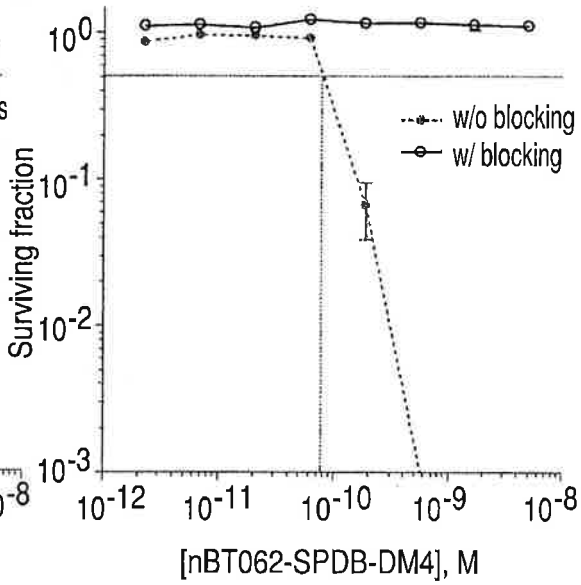


FIG. 7D

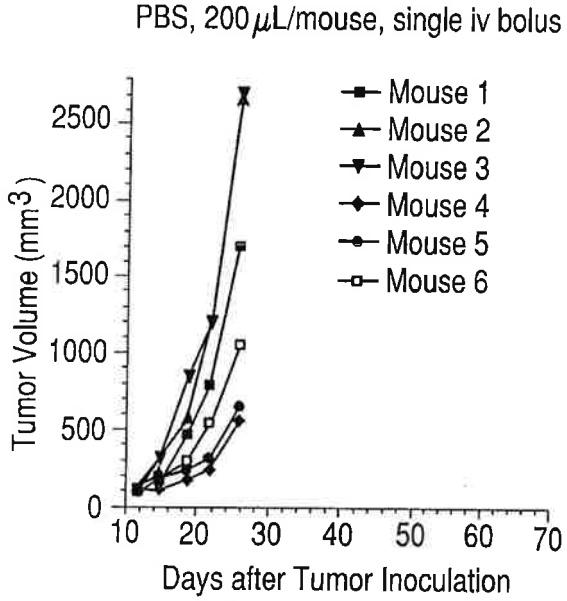


FIG. 8A

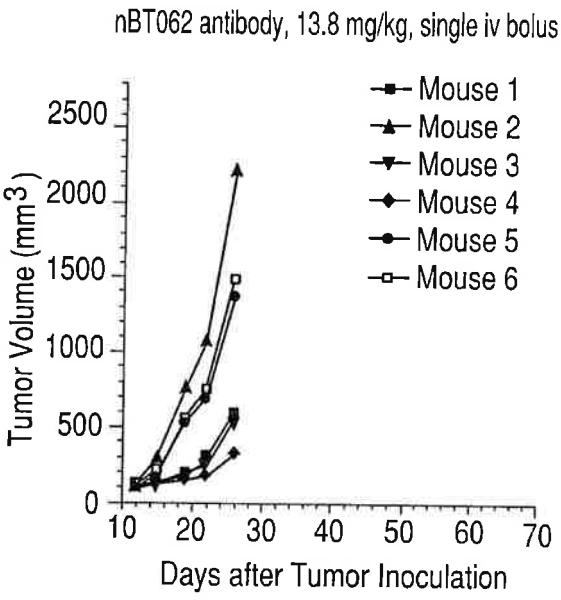


FIG. 8B

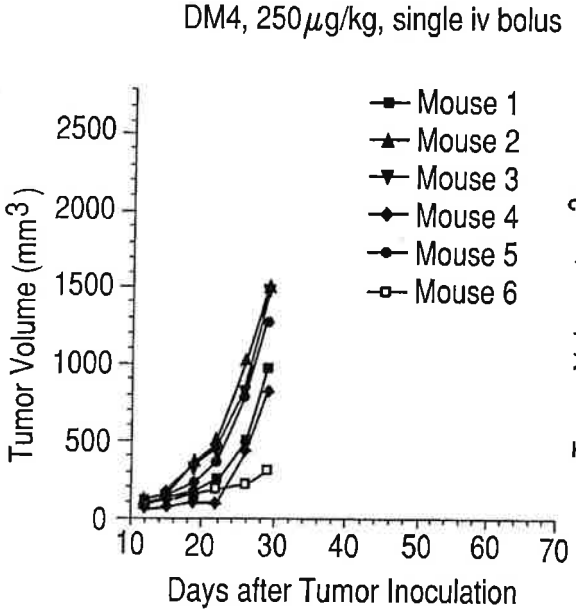


FIG. 8C

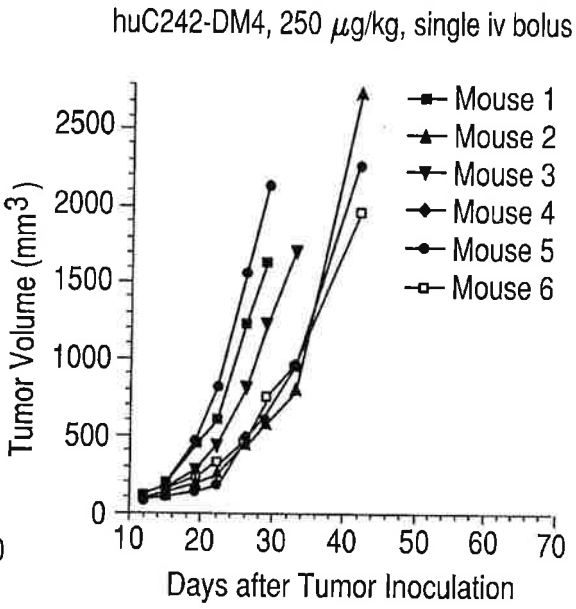


FIG. 8D

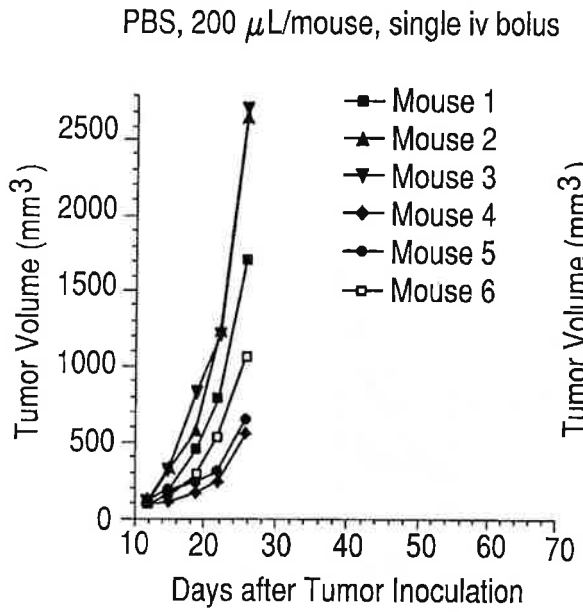


FIG. 9A

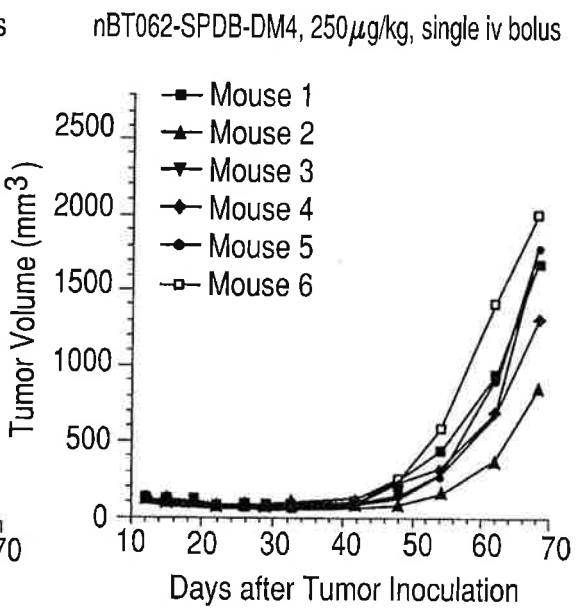


FIG. 9B

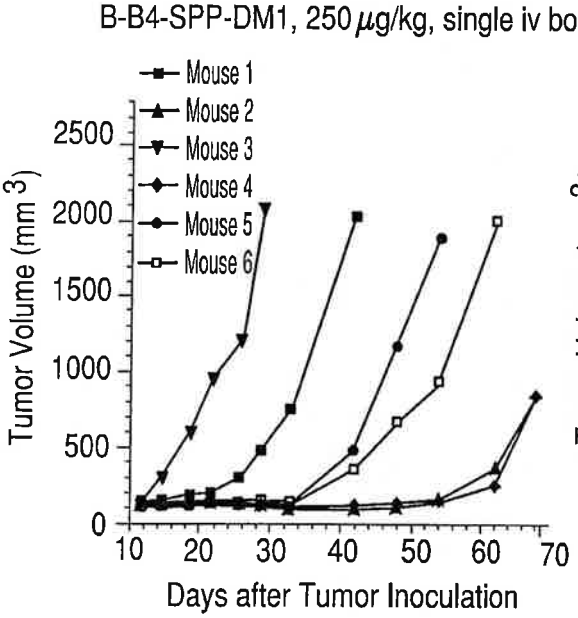


FIG. 9C

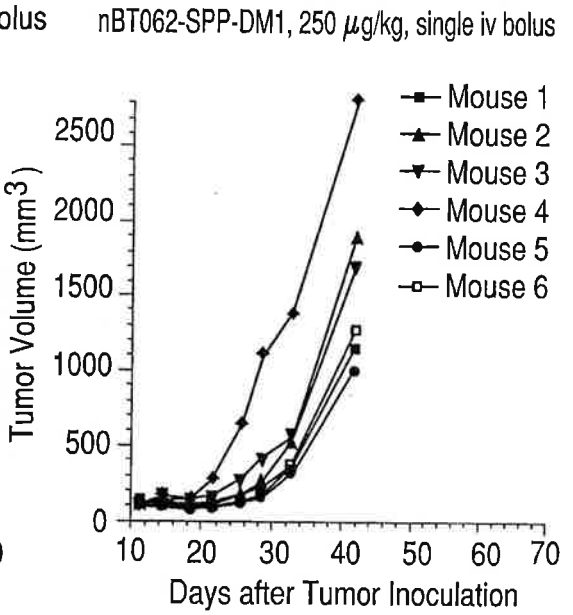


FIG. 9D

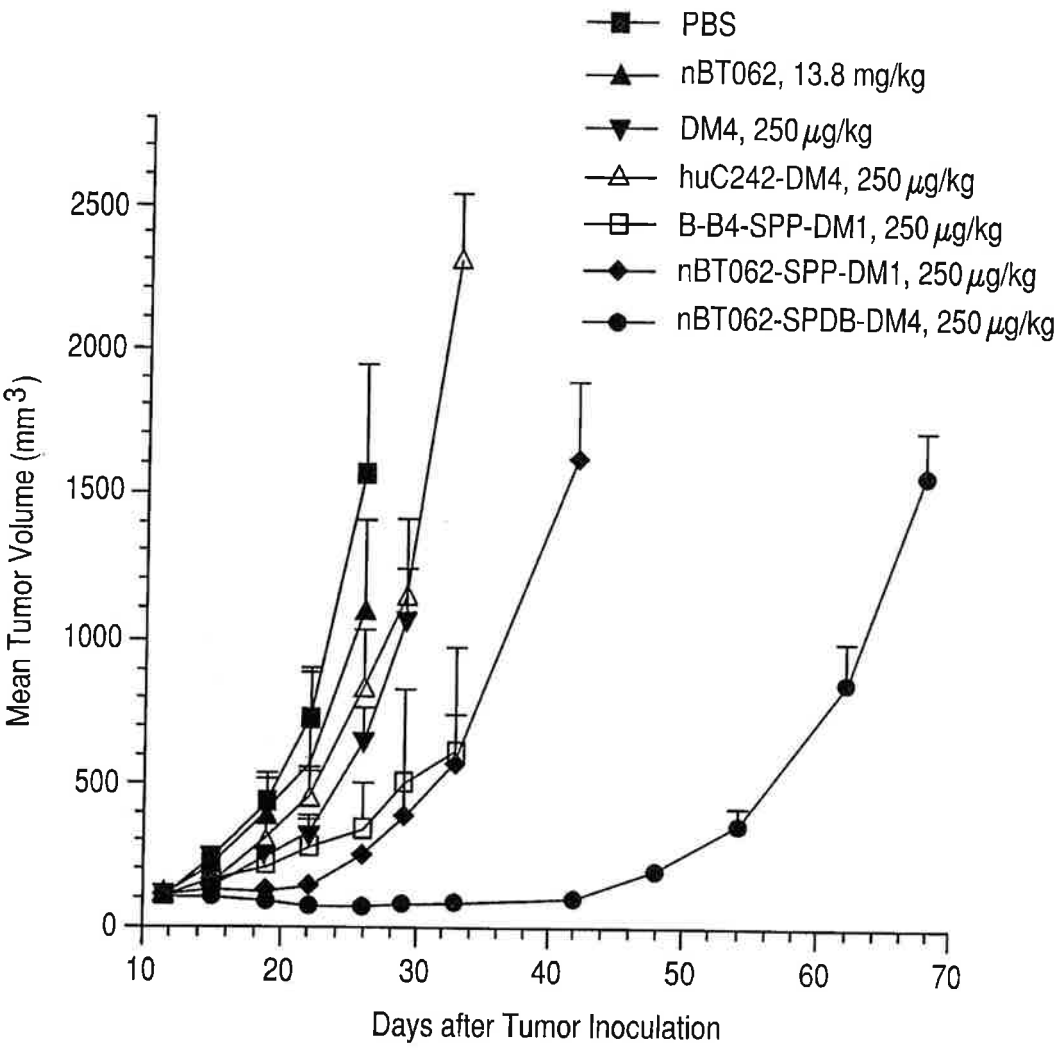

PBS
nBT062, 13.8 mg/kg
DM4, 250 μg/kg
huC242-DM4, 250 μg/kg
B-B4-SPP-DM1, 250 μg/kg
nBT062-SPP-DM1, 250 μg/kg
nBT062-SPDB-DM4, 250 μg/kg
Mean Tumor Volume (mm3)
2500
2000
1500
1000
500
0
10
20
30
40
50
60
70
Days after Tumor Inoculation

FIG. 10

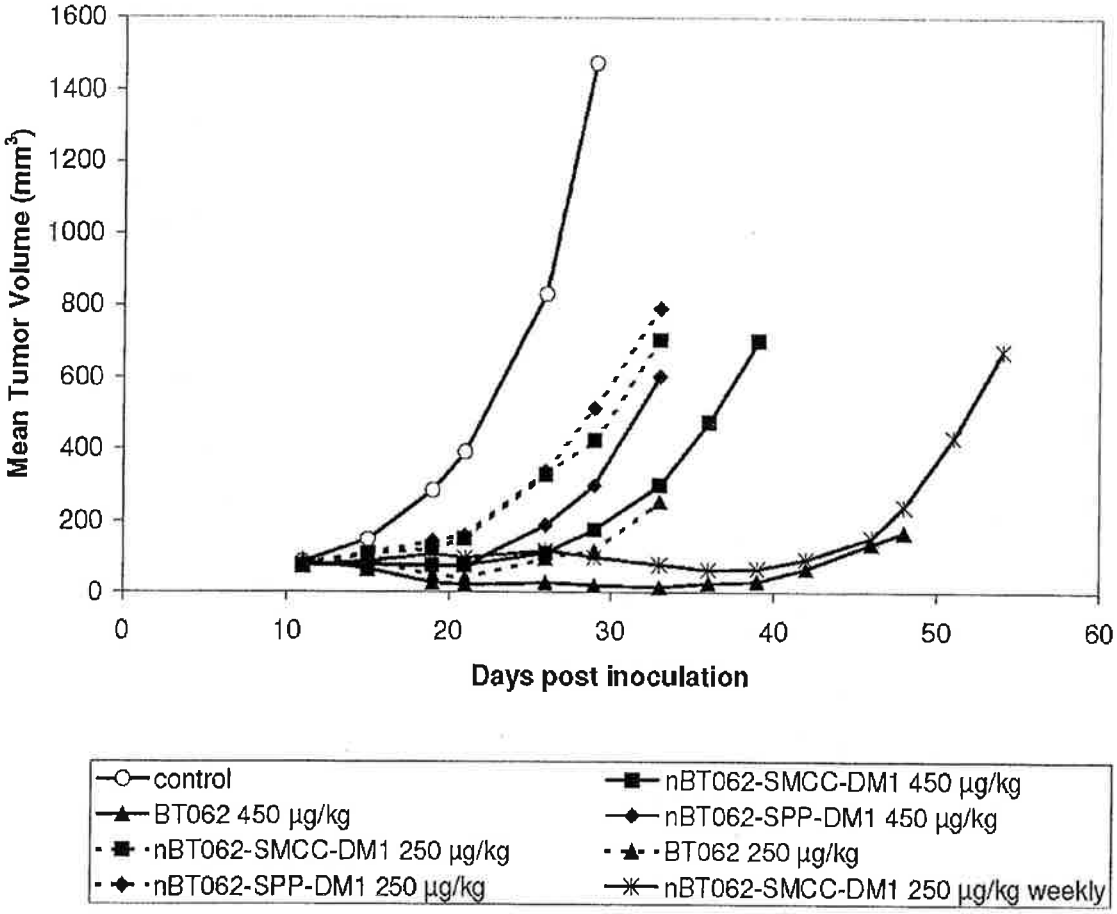

1600
1400
1200
1000
800
600
400
200
0
Mean Tumor Volume (mm3)
0
10
20
30
40
50
60
Days post inoculation
control
BT062 450 µg/kg
nBT062-SMCC-DM1 250 µg/kg
nBT062-SPP-DM1 250 µg/kg
nBT062-SMCC-DM1 450 µg/kg
nBT062-SPP-DM1 450 µg/kg
BT062 250 µg/kg
nBT062-SMCC-DM1 250 µg/kg weekly

FIG. 11A

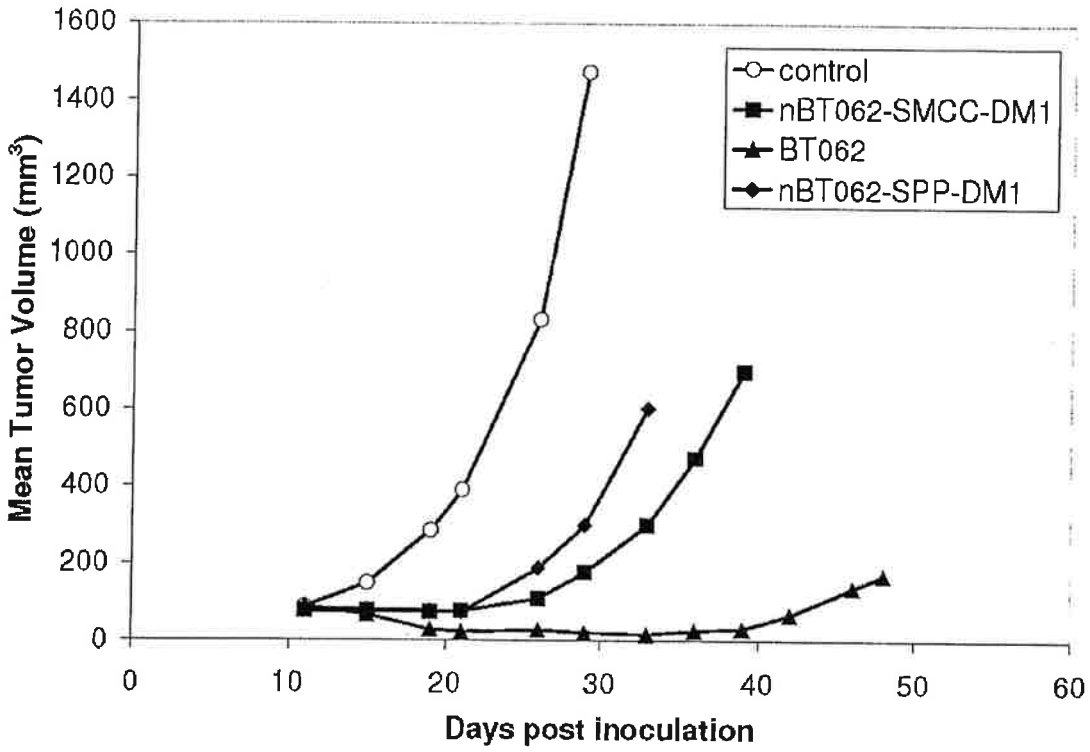

1600
1400
1200
1000
800
600
400
200
0
Mean Tumor Volume (mm3)
0
10
20
30
40
50
60
Days post inoculation
control
nBT062-SMCC-DM1
BT062
nBT062-SPP-DM1

FIG. 11B

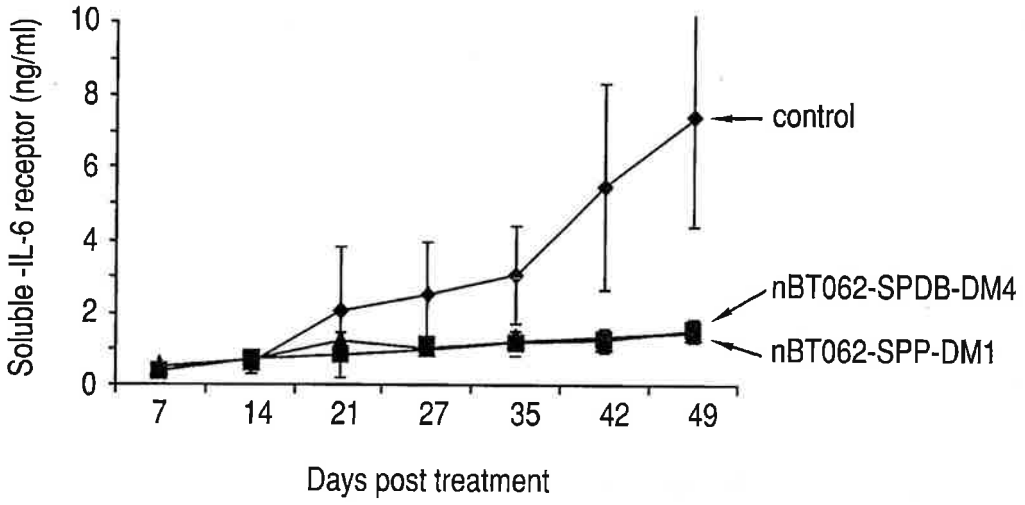

Soluble -IL-6 receptor (ng/ml)
10
8
6
4
2
0
7
14
21
27
35
42
49
Days post treatment
control
nBT062-SPDB-DM4
nBT062-SPP-DM1

FIG. 12

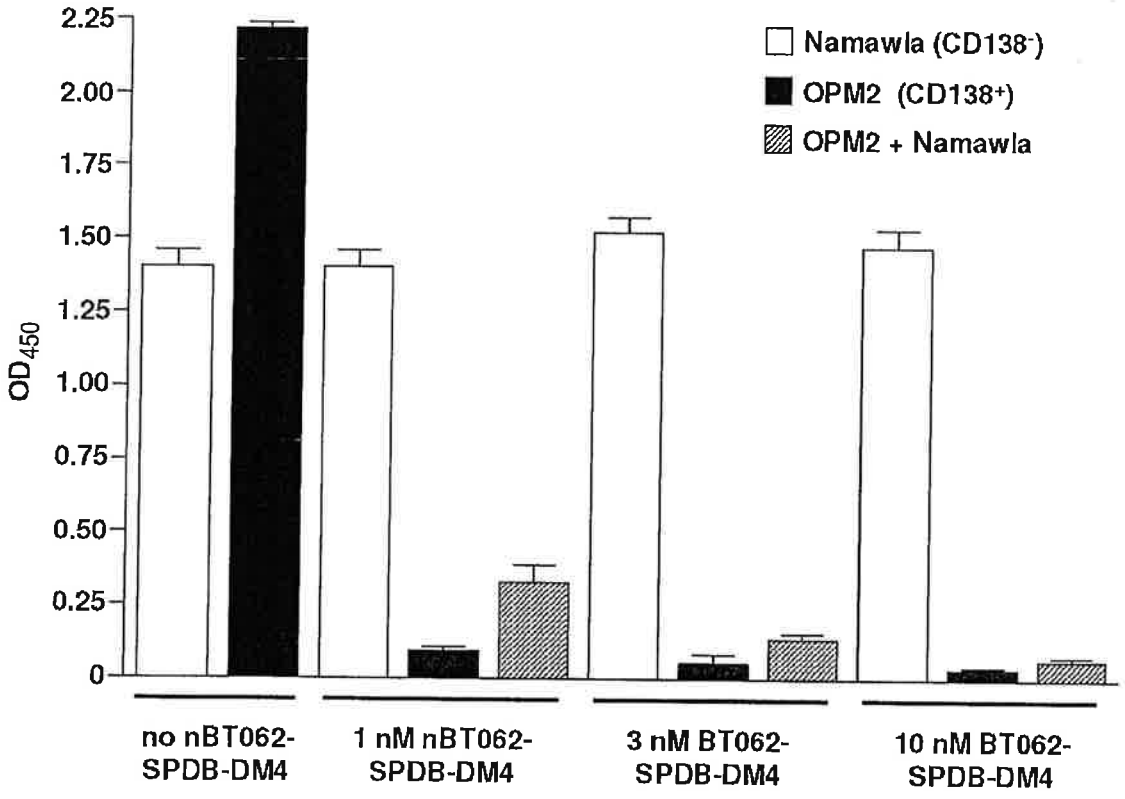

2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0
OD450
Namawla (CD138-)
OPM2 (CD138+)
OPM2 + Namawla
no nBT062-SPDB-DM4
1 nM nBT062-SPDB-DM4
3 nM BT062-SPDB-DM4
10 nM BT062-SPDB-DM4

FIG. 13