FIGURE 1:

A)

```
                    10        20        30        40        50        60
VH 14f7     QVQLQQSGNELAKPGASMKMSCRASGYSFTSYWIHWLKQRPDQGLEWIGYIDPATAYTESNQKF
VH human    .T..V...A.VR.....VRV..K....T.IDSY...IR.A.GH....V.W.N.NSGG.NYAPR.
VH 14f7hT   ....Q...A.VV.....VRV.................R.A.G.....V..............

                70        80            90          100                 110
VH 14f7     KDKAILTADRSSNTAFMYLNSLTSEDSAVYYCARESP---RLRRGIYYYAMDYWGQGTTVTVSS
VH human    QGRVTM.R.A.FS..Y.D.R..R.D....F...KSD.FWSDYYNFD.S.TL.V...........
VH 14f7hT   ....................................---.......................
```

B)

```
                10          20          30        40  50          60
VK 14f7     DLVLTQSPATLSVTPGDSVSFSCRASQSISNNLHWYQQRTHESPRLLIKYASQSISGIPSRFSG
VK human    .IQM.Z..SS..ASV.BR.TIT....ZT..SY.B..ZZKPGKA.B...YA..BLH..V......
VK 14f7hT   ....................................RTHE..............V......

             70        80        90        100
VK 14f7     SGSGTDFTLSIISVETEDFGMYFCQQSNRWPLTFGAGTKLELKRA
VK human    .....B..FT.S.LZPZB.AT.Y.ZZ.Y.S.T...Z..R.ZI...
VK 14f7hT   ..........................................
```

FIGURE 2:

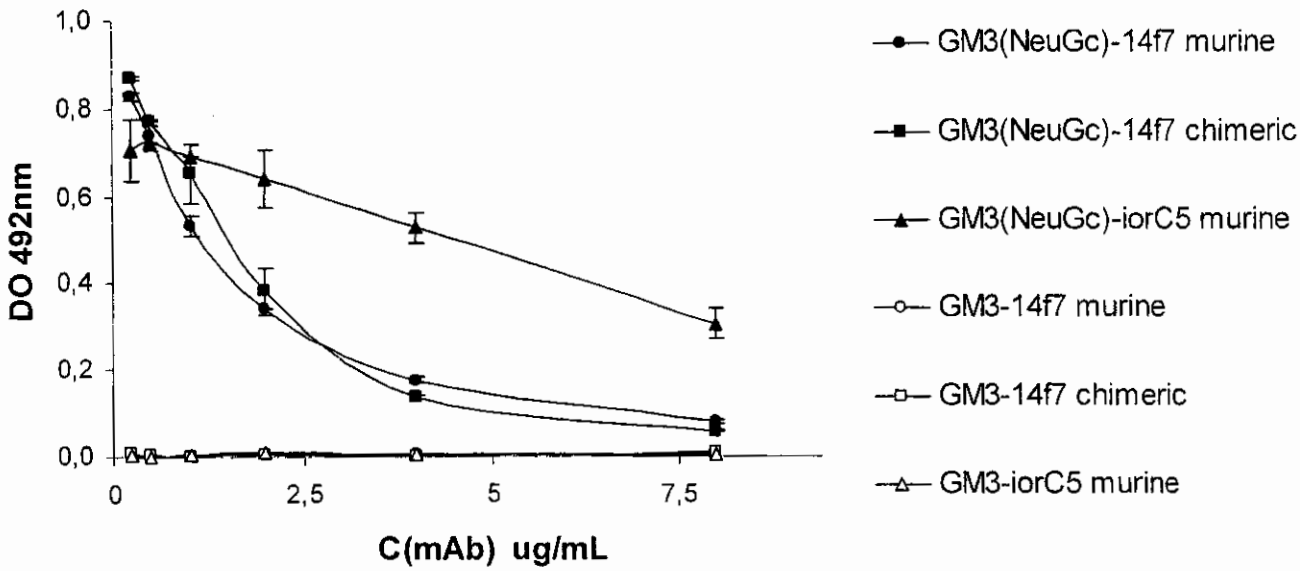

1,0
0,8
0,6
0,4
0,2
0,0
DO 492nm
0
2,5
5
7,5
C(mAb) ug/mL
GM3(NeuGc)-14f7 murine
GM3(NeuGc)-14f7 chimeric
GM3(NeuGc)-iorC5 murine
GM3-14f7 murine
GM3-14f7 chimeric
GM3-iorC5 murine

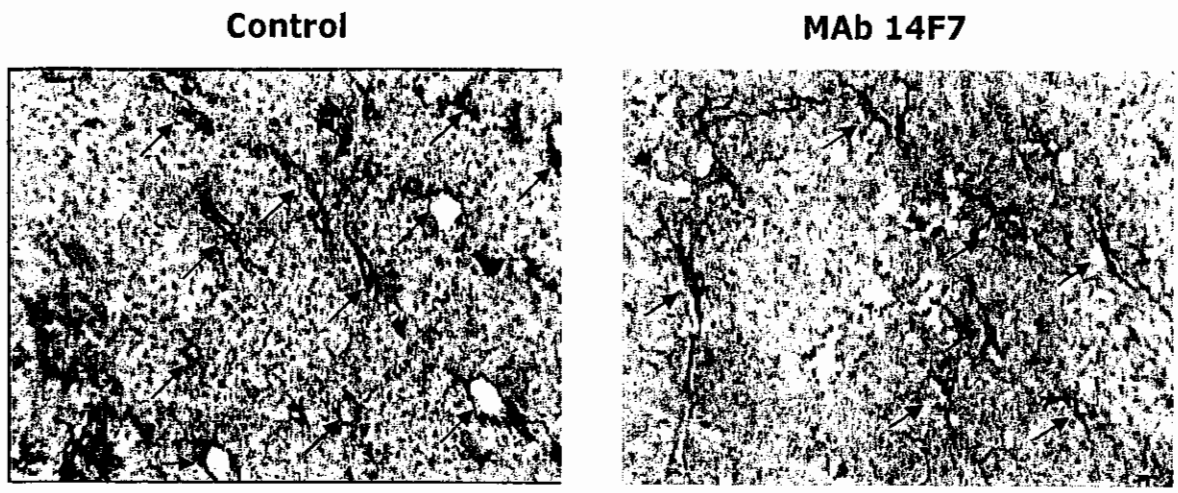
FIGURE 3:



B16F B16F1 + B16F1+14

FIGURE 4:

A)


Control
MAb 14F7

B)

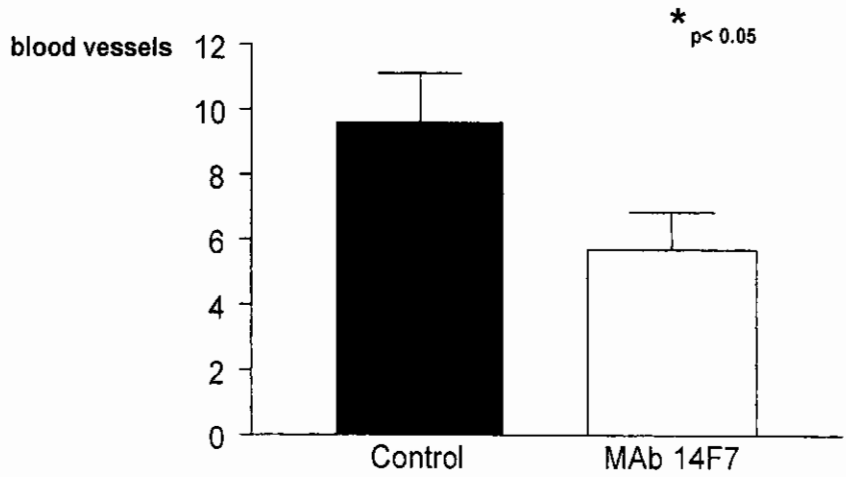

blood vessels
12
10
8
6
4
2
0
*
p< 0.05
Control
MAb 14F7

FIGURE 5:

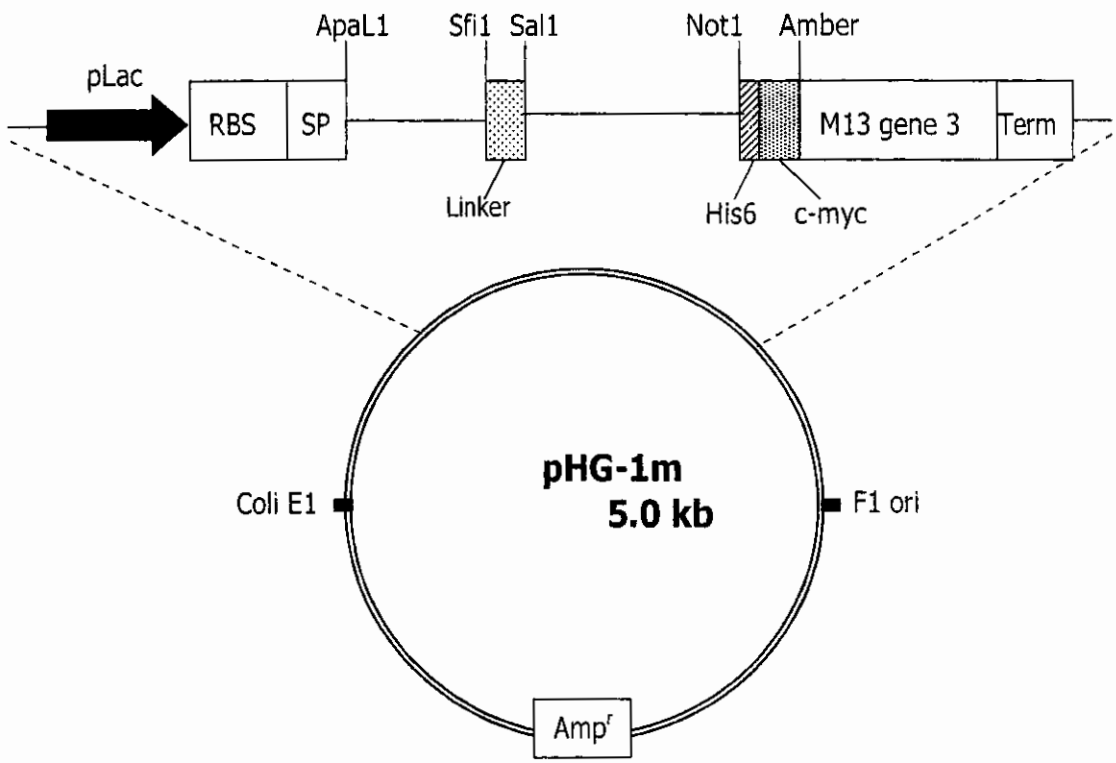

ApaL1
Sfi1
Sal1
Not1
Amber
pLac
RBS
SP
M13 gene 3
Term
Linker
His6
c-myc
pHG-1m
5.0 kb
Coli E1
F1 ori
Amp^r

FIGURE 6:

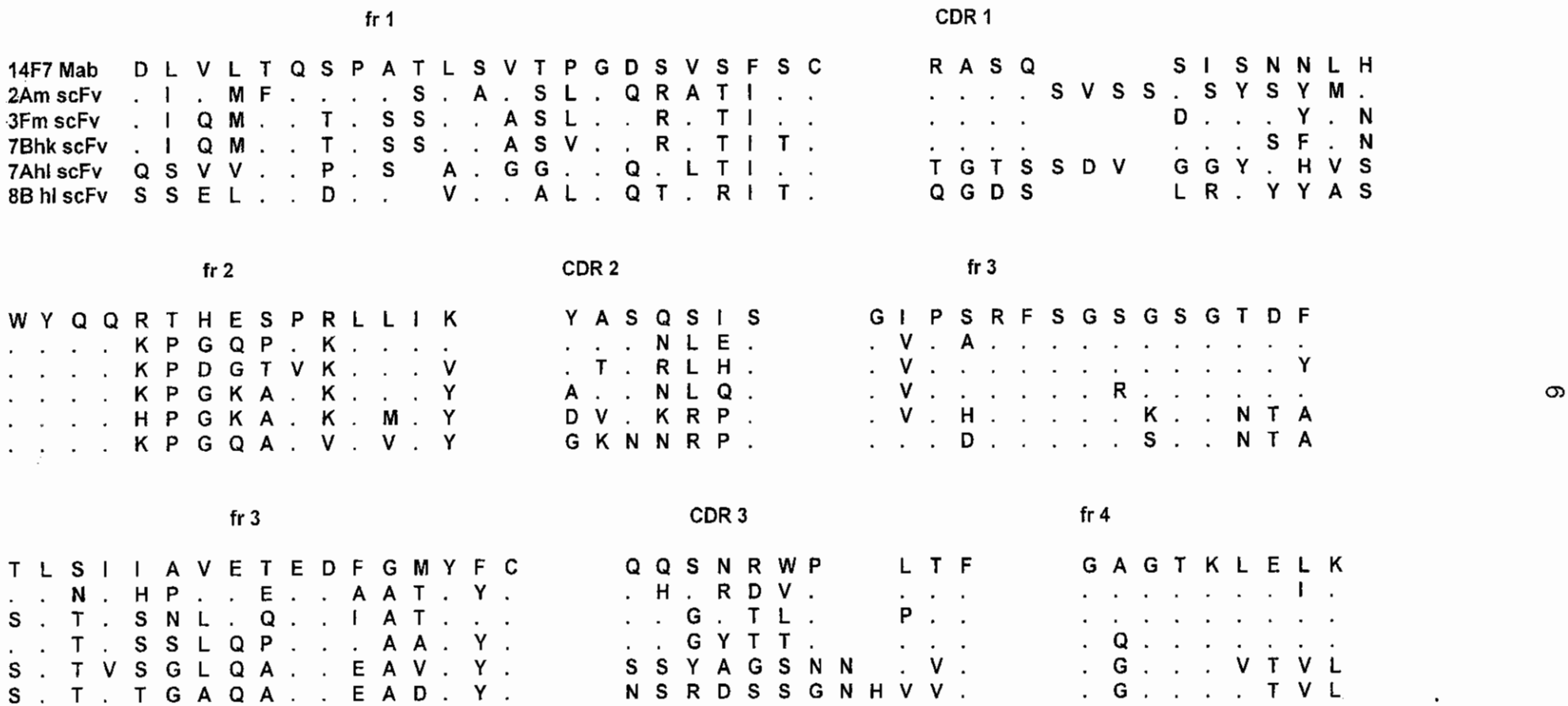

fr 1
CDR 1
14F7 Mab D L V L T Q S P A T L S V T P G D S V S F S C R A S Q S I S N N L H
2Am scFv . I . M F . . . . S . A . S L . Q R A T I . . . . . S V S S . S Y S Y M .
3Fm scFv . I Q M . . T . S S . . A S L . . R . T I . . . . . D . . . Y . N
7Bhk scFv . I Q M . . T . S S . . A S V . . R . T I T . . . . . S F . N
7Ahl scFv Q S V V . . P . S A . G G . . Q . L T I . . T G T S S D V G G Y . H V S
8B hl scFv S S E L . . D . . V . . A L . Q T . R I T . Q G D S L R . Y Y A S
fr 2
CDR 2
fr 3
W Y Q Q R T H E S P R L L I K Y A S Q S I S G I P S R F S G S G S G T D F
. . . . K P G Q P . K . . . . . V . A . . . . . A . . . . . .
. . . . K P D G T V K . . . V . T . R L H . . V . . . . . Y
. . . . K P G K A . K . . . Y A . . N L Q . . V . . . . . R . . . . . .
. . . . H P G K A . K . M . Y D V . K R P . . V . H . . . . . K . . N T A
. . . . K P G Q A . V . V . Y G K N N R P . . . . D . . . . . S . . N T A
fr 3
CDR 3
fr 4
T L S I I A V E T E D F G M Y F C Q Q S N R W P L T F G A G T K L E L K
. . N . H P . . E . . A A T . Y . . H . R D V . . . . . I .
S . T . S N L . Q . . I A T . . . . G . T L . P . . . . . .
. . T . S S L Q P . . . A A . Y . . G Y T T . . . . Q . . . . . .
S . T V S G L Q A . . E A V . Y . S S Y A G S N N . V . G . . . V T V L
S . T . T G A Q A . . E A D . Y . N S R D S S G N H V V . G . . . . T V L

FIGURE 7:

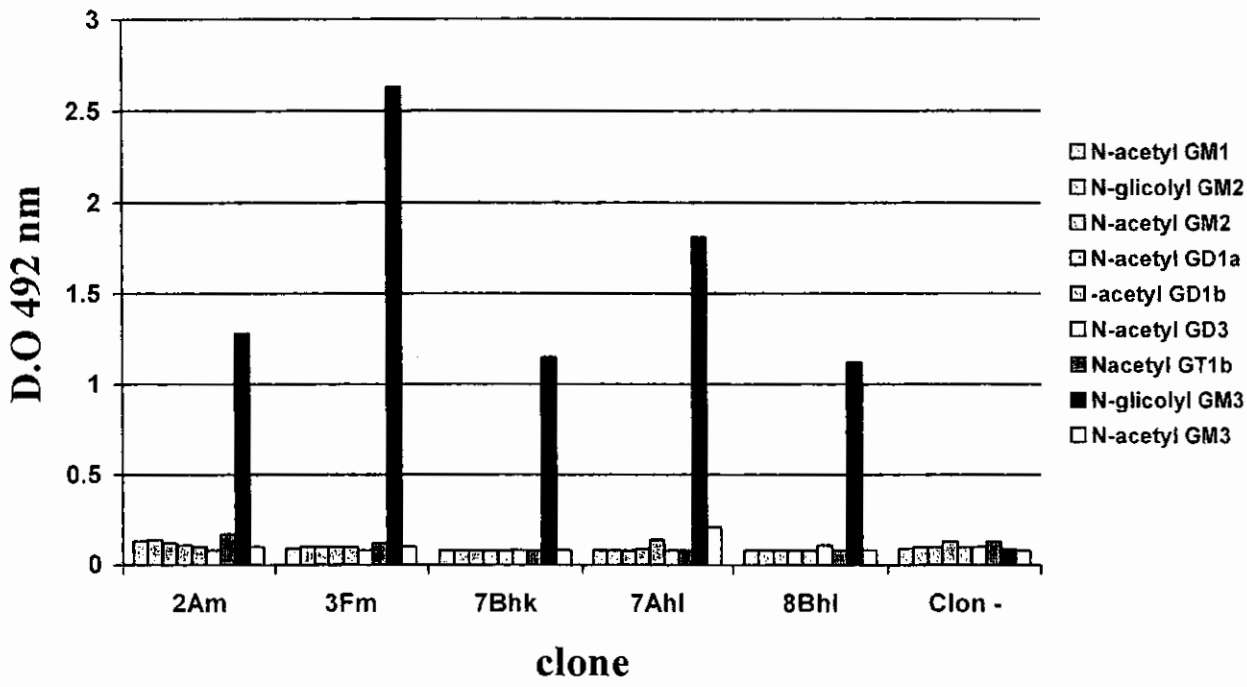
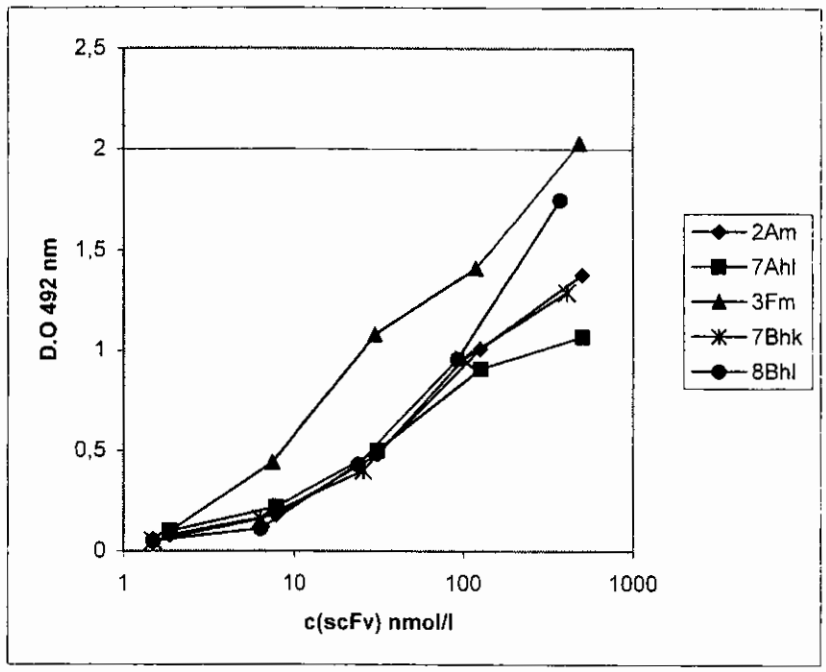

3
2.5
2
1.5
1
0.5
0
D.O 492 nm
2Am
3Fm
7Bhk
7Ahl
8Bhl
Clon -
clone
N-acetyl GM1
N-glicolyl GM2
N-acetyl GM2
N-acetyl GD1a
-acetyl GD1b
N-acetyl GD3
Nacetyl GT1b
N-glicolyl GM3
N-acetyl GM3

FIGURE 8.


2,5
2
1,5
1
0,5
0
D.O 492 nm
1
10
100
1000
c(scFv) nmol/l
2Am
7Ahl
3Fm
7Bhk
8Bhl