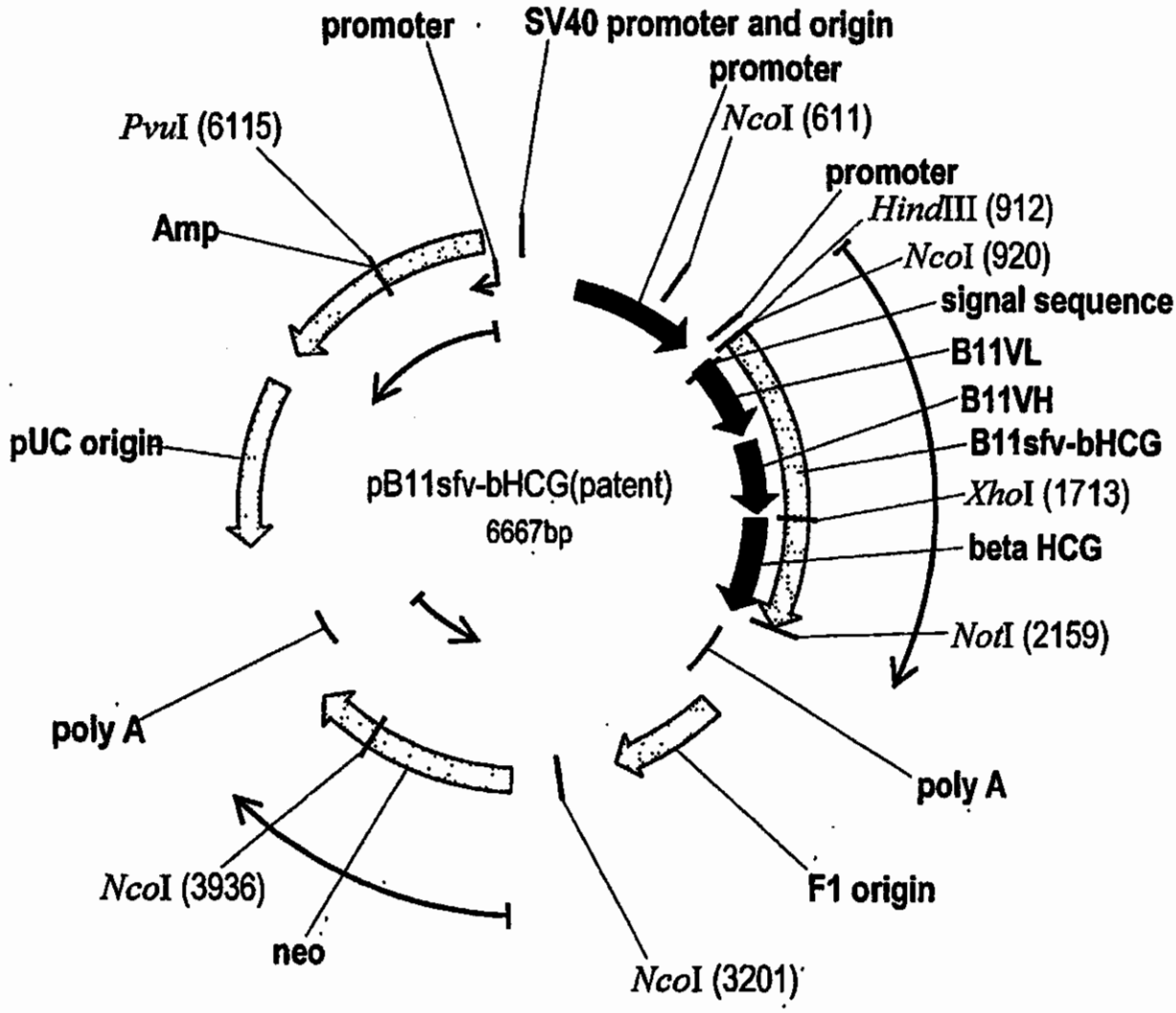

promoter
SV40 promoter and origin
promoter
NcoI (611)
promoter
HindIII (912)
NcoI (920)
signal sequence
B11VL
B11VH
B11sfv-bHCG
XhoI (1713)
beta HCG
NotI (2159)
poly A
F1 origin
NcoI (3201)
neo
NcoI (3936)
poly A
pUC origin
Amp
PvuI (6115)
pB11sfv-bHCG(patent)
6667bp

*Fig. 1*

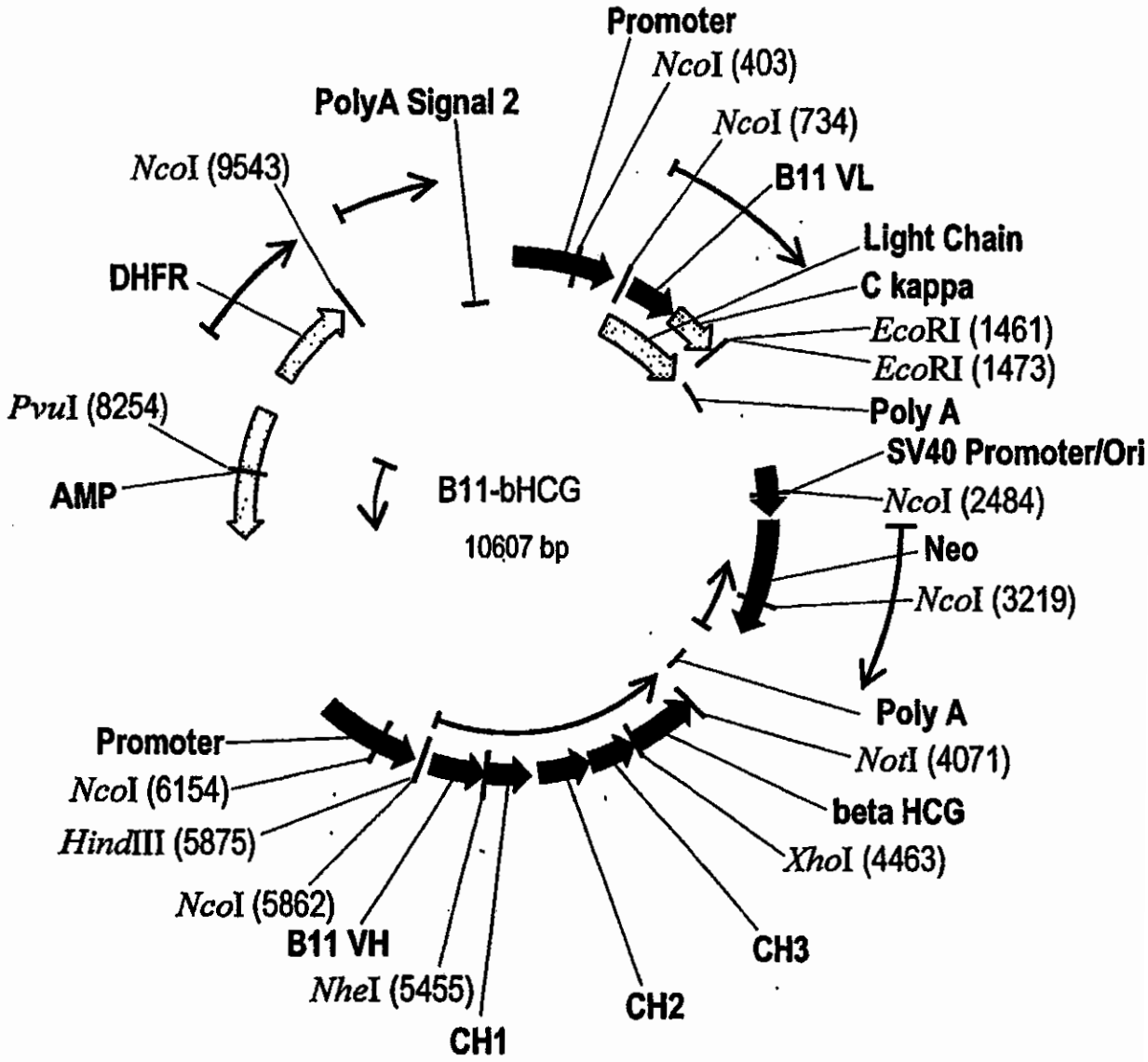

Promoter
NcoI (403)
NcoI (734)
B11 VL
Light Chain
C kappa
EcoRI (1461)
EcoRI (1473)
Poly A
SV40 Promoter/Ori
NcoI (2484)
Neo
NcoI (3219)
Poly A
NotI (4071)
beta HCG
XhoI (4463)
CH3
CH2
CH1
NheI (5455)
B11 VH
NcoI (5862)
HindIII (5875)
NcoI (6154)
Promoter
PvuI (8254)
AMP
B11-bHCG
10607 bp
NcoI (9543)
DHFR
PolyA Signal 2

*Fig. 2*

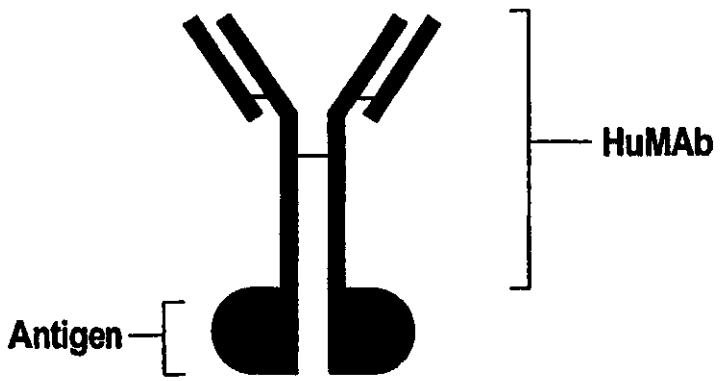

HuMAb
Antigen

*Fig. 3*

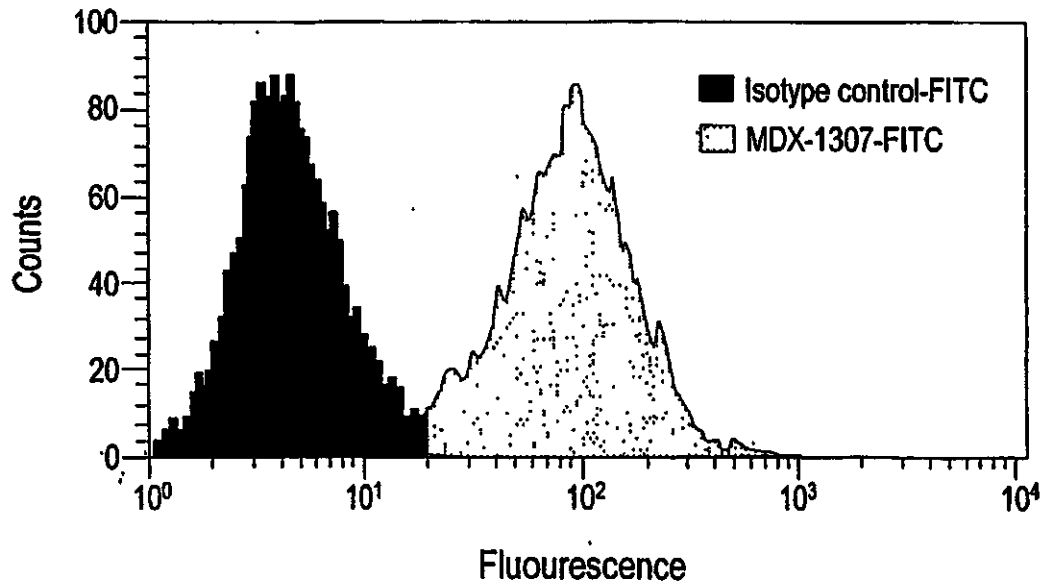

100
80
60
40
20
0
Counts
Isotype control-FITC
MDX-1307-FITC
$10^0$
$10^1$
$10^2$
$10^3$
$10^4$
Fluourescence

*Fig. 4*

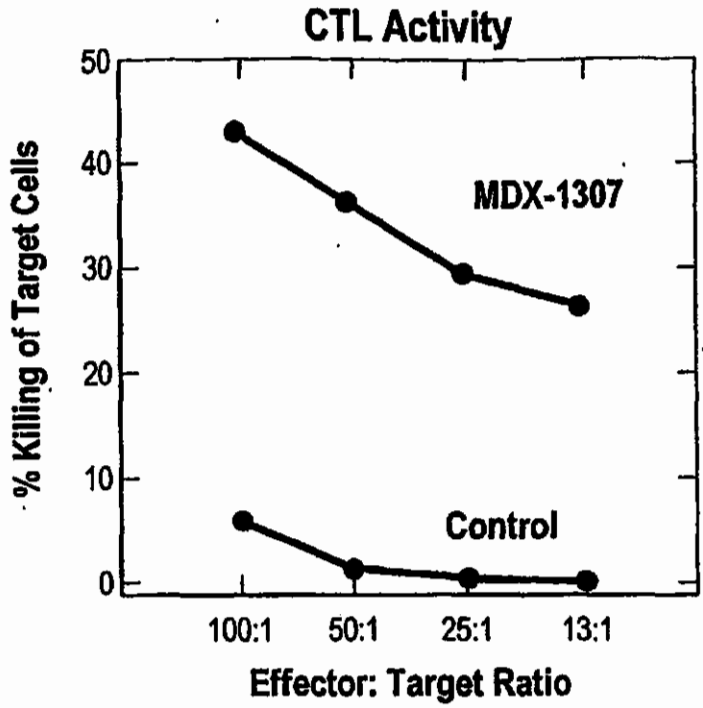

CTL Activity
% Killing of Target Cells
50
40
30
20
10
0
MDX-1307
Control
100:1
50:1
25:1
13:1
Effector: Target Ratio

*Fig. 5*

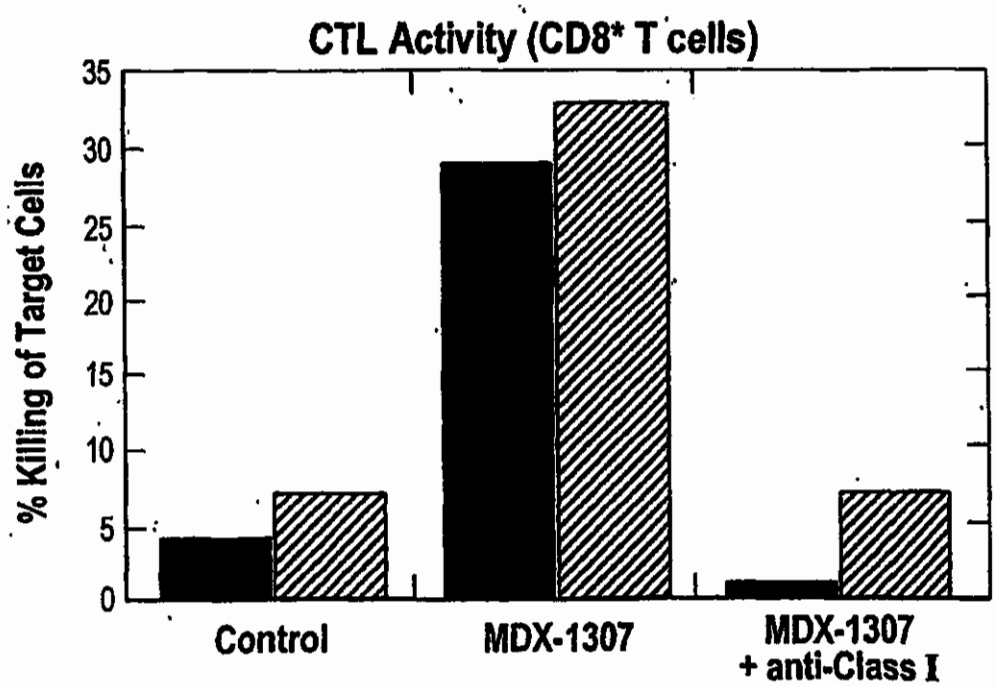

CTL Activity (CD8* T cells)
% Killing of Target Cells
35
30
25
20
15
10
5
0
Control
MDX-1307
MDX-1307
+ anti-Class I

*Fig. 6*

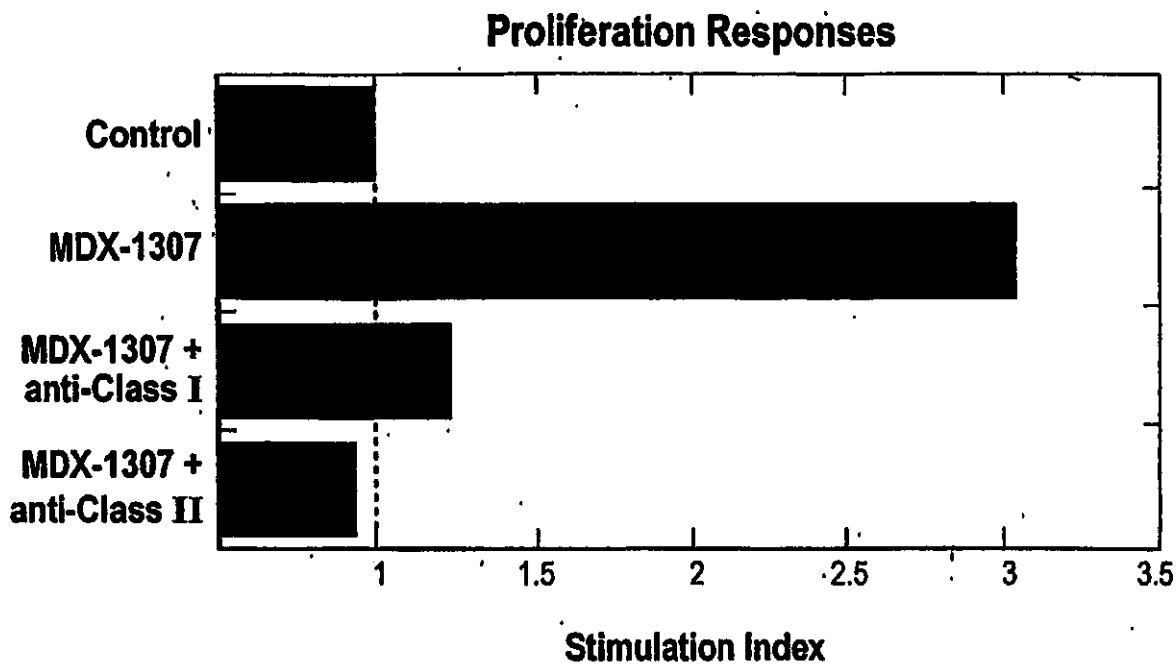

Proliferation Responses
Control
MDX-1307
MDX-1307 + anti-Class I
MDX-1307 + anti-Class II
1
1.5
2
2.5
3
3.5
Stimulation Index

*Fig. 7*

Anti-Mannose Receptor B11 VH

V-segment: Locus - 5-51 Name: DP-73/V5-51
D-segment: Unknown
J-segment: JH4b

```
     E   V   Q   L   V   Q   S   G   A   E   V   K   K   P   G   E   S   L
1    GAG GTG CAG CTG GTG CAG TCT GGA GCA GAG GTG AAA AAG CCC GGG GAG TCT CTG

                                                    CDR 1
                                                    ~~~~~~~~~~~~~~~~~~~~
     R   I   S   C   K   G   S   G   D   S   F   T   T   Y   W   I   G   W
55   AGG ATC TCC TGT AAG GGT TCT GGA GAC AGT TTT ACC ACC TAC TGG ATC GGC TGG

                                                        CDR 2
                                                        ~~~~~~~~~~~~~~~~~~~~
     V   R   Q   M   P   G   K   G   L   E   W   M   G   I   I   Y   P   G
109  GTG CGC CAG ATG CCC GGG AAA GGC CTG GAG TGG ATG GGG ATC ATC TAT CCT GGT

                    CDR 2
                    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
     D   S   D   T   I   Y   S   P   S   F   Q   G   Q   V   T   I   S   A
163  GAC TCT GAT ACC ATA TAC AGC CCG TCC TTC CAA GGC CAG GTC ACC ATC TCA GCC

     D   K   S   I   S   T   A   Y   L   Q   W   S   S   L   K   A   S   D
217  GAC AAG TCC ATC AGC ACC GCC TAC CTG CAG TGG AGC AGC CTG AAG GCC TCG GAC

                                            CDR 3
                                            ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
     T   A   M   Y   Y   C   T   R   G   D   R   G   V   D   Y   W   G   Q
271  ACC GCC ATG TAT TAC TGT ACG AGA GGG GAC CGG GGC GTT GAC TAC TGG GGC CAG
                                                    |
                                                    └──► JH4b
     G   T   L   V   T   V   S   S
325  GGA ACC CTG GTC ACC GTC TCC TCA
```

*Fig. 8*

Anti-Mannose Receptor B11 VL

V-segment: Locus - L15 Name: DPK7/HK134
J-segment: JK1

```
        D   I   Q   M   T   Q   S   P   S   S   L   S   A   S   V   G   D   R
1       GAC ATC CAG ATG ACC CAG TCT CCA TCC TCA CTG TCT GCA TCT GTA GGA GAC AGA

                                    CDR 1
                            ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
        V   T   I   T   C   R   A   S   Q   G   I   S   R   W   L   A   W   Y
55      GTC ACC ATC ACT TGT CGG GCG AGT CAG GGT ATT AGC AGG TGG TTA GCC TGG TAT

                                                                CDR 2
                                                            ~~~~~~~~~~~~~~~~~~~
        Q   Q   K   P   E   K   A   P   K   S   L   I   Y   A   A   S   S   L
109     CAG CAG AAA CCA GAG AAA GCC CCT AAG TCC CTG ATC TAT GCT GCA TCC AGT TTG

        CDR 2
        ~~~~~~~~
        Q   S   G   V   P   S   R   F   S   G   S   G   S   G   T   D   F   T
163     CAA AGT GGG GTC CCA TCA AGG TTC AGC GGC AGT GGA TCT GGG ACA GAT TTC ACT

                                                                        CDR 3
                                                                        ~~~~~~~
        L   T   I   S   G   L   Q   P   E   D   F   A   T   Y   Y   C   Q   Q
217     CTC ACC ATC AGC GGC CTG CAG CCT GAA GAT TTT GCA ACT TAT TAC TGC CAA CAG

                CDR 3
        ~~~~~~~~~~~~~~~~~~~~~~~~~~~~
        Y   N   S   Y   P   R   T   F   G   Q   G   T   K   V   E   I   K
271     TAT AAT AGT TAC CCT CGG ACG TTC GGC CAA GGG ACC AAG GTG GAA ATC AAA
                                  ↳
                                  JK 1
```

*Fig. 9*

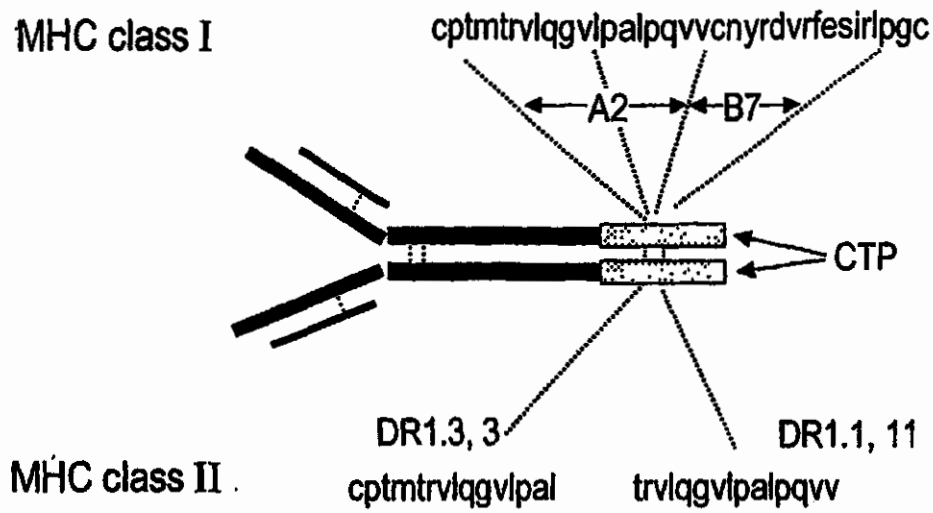

MHC class I
cptmtrvlqgvlpalpqvvcnyrdvrfesirlpgc
A2
B7
CTP
DR1.3, 3
DR1.1, 11
MHC class II
cptmtrvlqgvlpal
trvlqgvlpalpqvv

*Fig. 10*

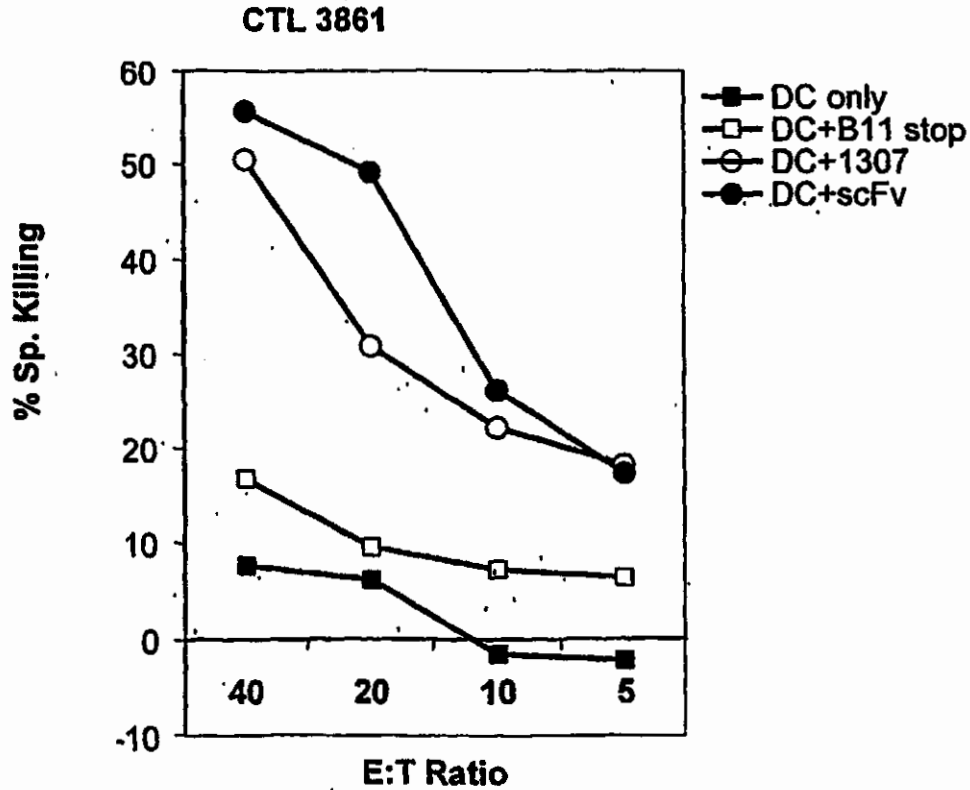

CTL 3861
% Sp. Killing
60
50
40
30
20
10
0
-10
40
20
10
5
E:T Ratio
DC only
DC+B11 stop
DC+1307
DC+scFv

*Fig. 11*

SUBSTITUTE SHEET (RULE 26)

**Anti-Mannose Receptor VH5-51 Regions**

```
                                                                                                                CDR1
5-51 germline      E V Q L V Q S G A E V K K P G E S L K I S C K G S G Y S F T S Y W I G
B11                - - - - - - - - - - - - - - - - R - - - - - - - D - - - T - - - - -

                                                                  CDR2
5-51 germline      W V R Q M P G K G L E W M G I I Y P G D S D T R Y S P S F Q G Q V T I
B11                - - - - - - - - - - - - - - - - - - - - - - - - I - - - - - - - - - -

                                                                                                        CDR3
5-51 germline      S A D K S I S T A Y L Q W S S L K A S D T A M Y Y C A R
B11                - - - - - - - - - - - - - - - - - - - - - - - - - T - G D R G V D Y

5-51 germline
B11                W G Q G T L V T V S S
```

*Fig. 12*

SUBSTITUTE SHEET (RULE 26)

Anti-Mannose Receptor VH regions (VH5-51):

```
VH5-51
Germline:  GAG GTG CAG CTG GTG CAG TCT GGA GCA GAG GTG AAA AAG CCC GGG GAG TCT CTG AAG ATC TCC TGT AAG GGT
B11:       --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- -G- --- --- --- --- ---

                                    _____CDR1_____
germline:  TCT GGA TAC AGC TTT ACC AGC TAC TGG ATC GGC TGG GTG CGC CAG ATG CCC GGG AAA GGC CTG GAG TGG ATG
B11:       --- --- G-- --T --- --- -C- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---

                                                CDR2
           _____________________________________________________________________
germline:  GGG ATC ATC TAT CCT GGT GAC TCT GAT ACC AGA TAC AGC CCG TCC TTC CAA GGC CAG GTC ACC ATC TCA GCC
B11:       --- --- --- --- --- --- --- --- --- --- -T- --- --- --- --- --- --- --- --- --- --- --- --- ---

germline:  GAC AAG TCC ATC AGC ACC GCC TAC CTG CAG TGG AGC AGC CTG AAG GCC TCG GAC ACC GCC ATG TAT TAC TGT
B11:       --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---

                          _____CDR3_____
germline:  GCG AGA
B11:       A-- --- GGG GAC CGG GGC GTT GAC TAC TGG GGC CAG GGA ACC CTG GTC ACC GTC TCC TCA
```

*Fig. 13*

Anti-Mannose Receptor Vk L15 Regions

```
                                                    CDR1
L15 germline  D I Q M T Q S P S S L S A S V G D R V T I T C R A S Q G I S S W L A W Y Q
B11           - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                  CDR2
L15 germline  Q K P E K A P K S L I Y A A S S L Q S G V P S R F S G S G S G T D F T L T
B11           - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                                                    CDR3
L15 germline  I S S L Q P E D F A T Y Y C Q Q Y N S Y P
B11           - - G - - - - - - - - - - - - - - R T F G Q G T K V E I K
```

Fig. 14

SUBSTITUTE SHEET (RULE 26)

**Anti-Mannose Receptor VK Regions**

```
L15 germline: GAC ATC CAG ATG ACC CAG TCT CCA TCC TCA CTG TCT GCA TCT GTA GGA GAC AGA GTC ACC ATC
B11:          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---

                          ________________CDR1________________
L15 germline: ACT TGT CGG GCG AGT CAG GGT ATT AGC AGC TGG TTA GCC TGG TAT CAG CAG AAA CCA GAG AAA
B11:          --- --- --- --- --- --- --- --- --- --G --- --- --- --- --- --- --- --- --- ---

                                                ____________CDR2____________
L15 germline: GCC CCT AAG TCC CTG ATC TAT GCT GCA TCC AGT TTG CAA AGT GGG GTC CCA TCA AGG TTC AGC
B11:          --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- --- ---

L15 germline: GGC AGT GGA TCT GGG ACA GAT TTC ACT CTC ACC ATC AGC AGC CTG GAG CCT GAA GAT TTT GCA
B11:          --- --- --- --- --- --- --- --- --- --- --- --- --- G-- --- --- --- --- --- ---

                                        ____________CDR3____________
L15 germline: ACT TAT TAC TGC CAA CAG TAT AAT AGT TAC CCT
B11:          --- --- --- --- --- --- --- --- --- --- --- CGG ACG TTC GGC CAA GGG ACC AAG GTG GAA

B11:          ATC AAA
```

*Fig. 15*