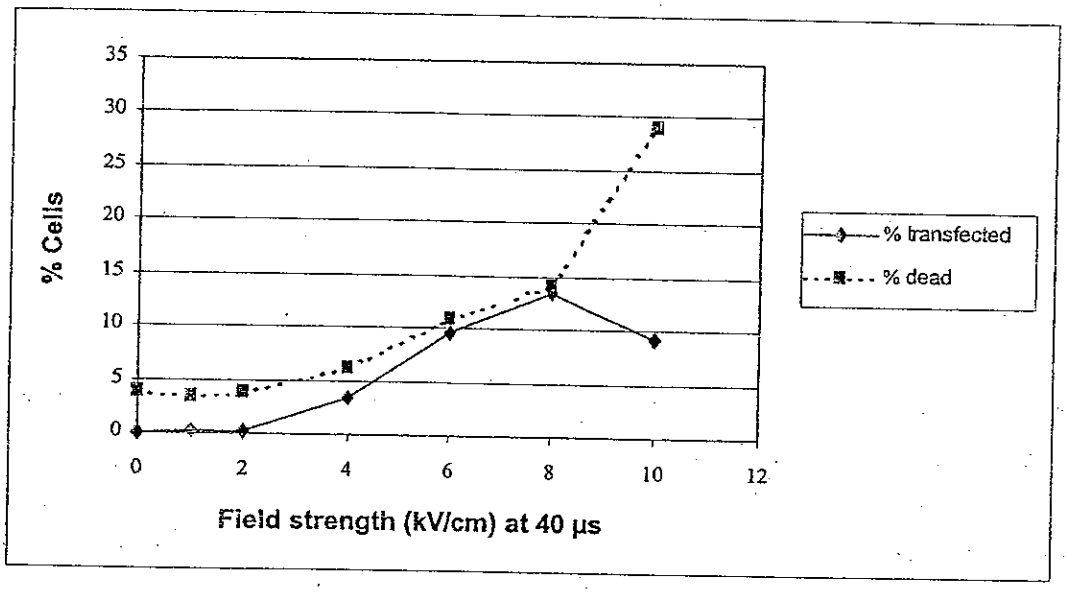
Fig. 1

Electrical nuclear transport in relation to the field strength and the pulse duration

a)



b)

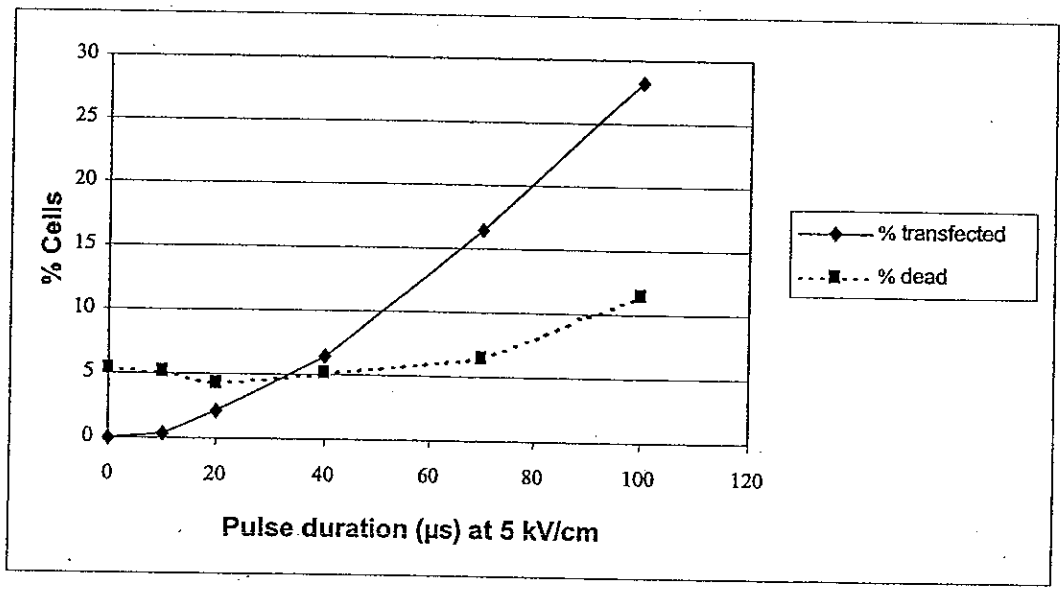
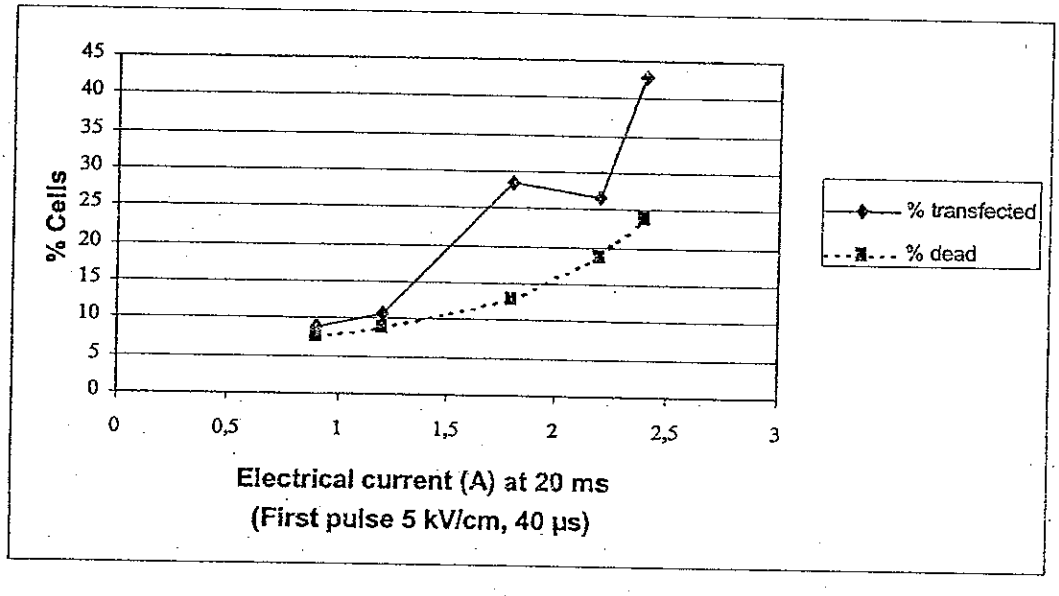


Fig. 2

Increase of the efficiency of the electrical nuclear transport by a current flow following the pulse

a)



b)

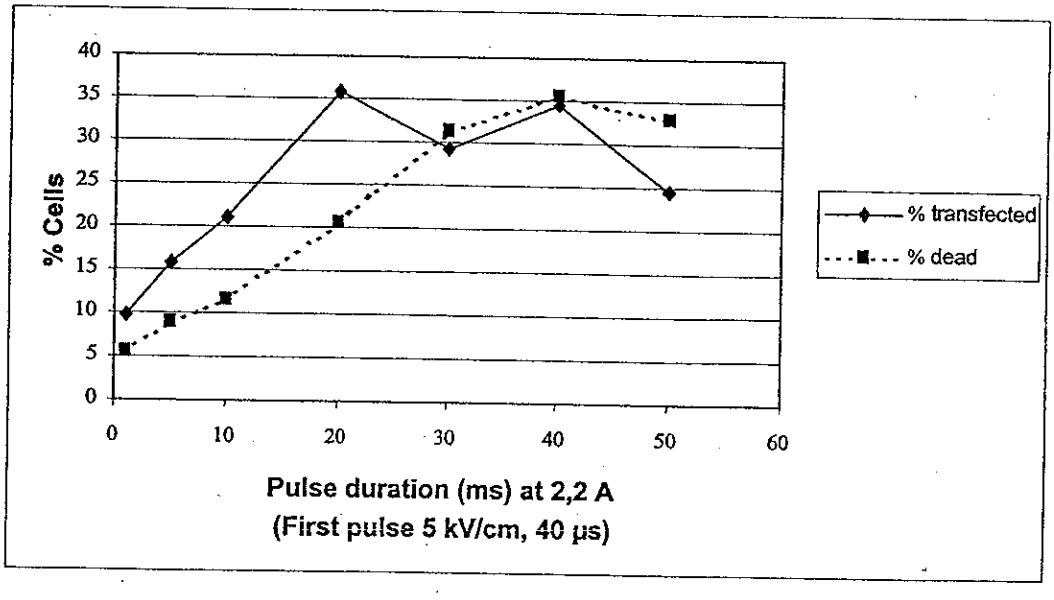


Fig. 3

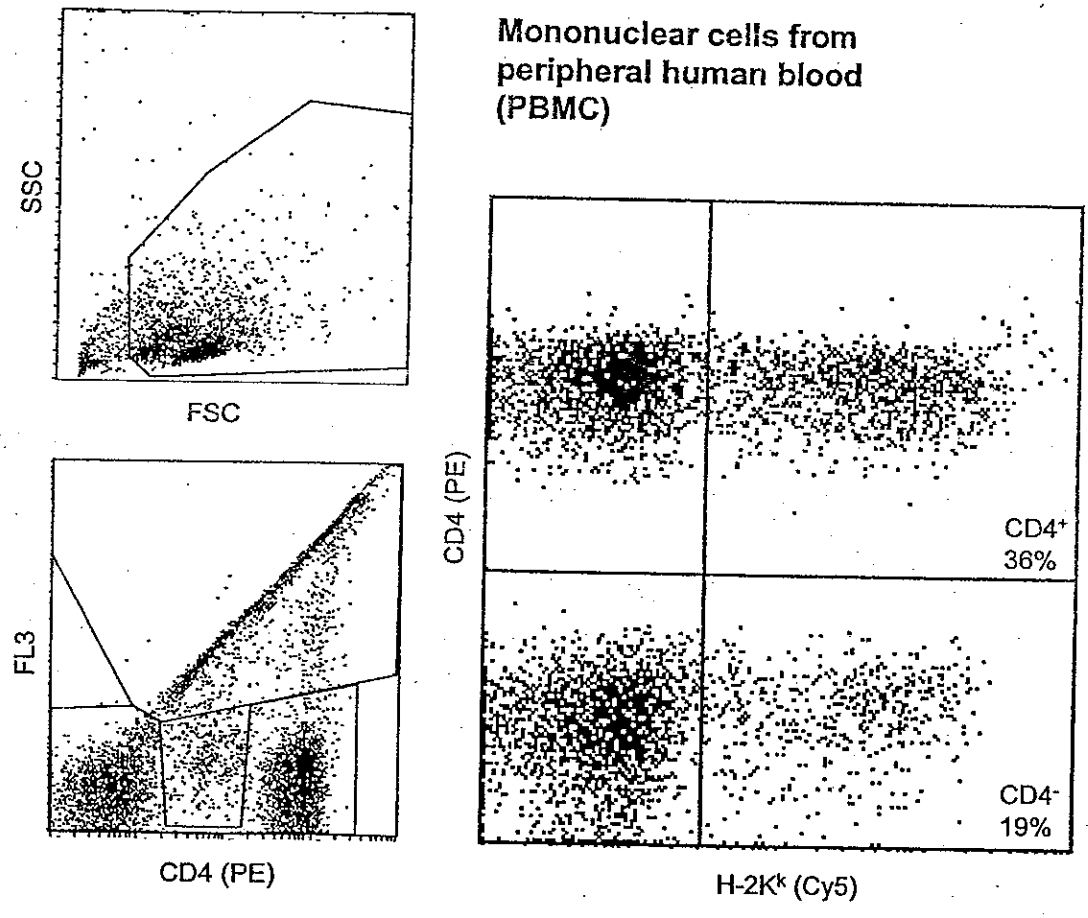

SSC
FSC
FL3
CD4 (PE)
Mononuclear cells from peripheral human blood (PBMC)
CD4 (PE)
CD4+ 36%
CD4- 19%
H-2Kk (Cy5)

Fig. 4

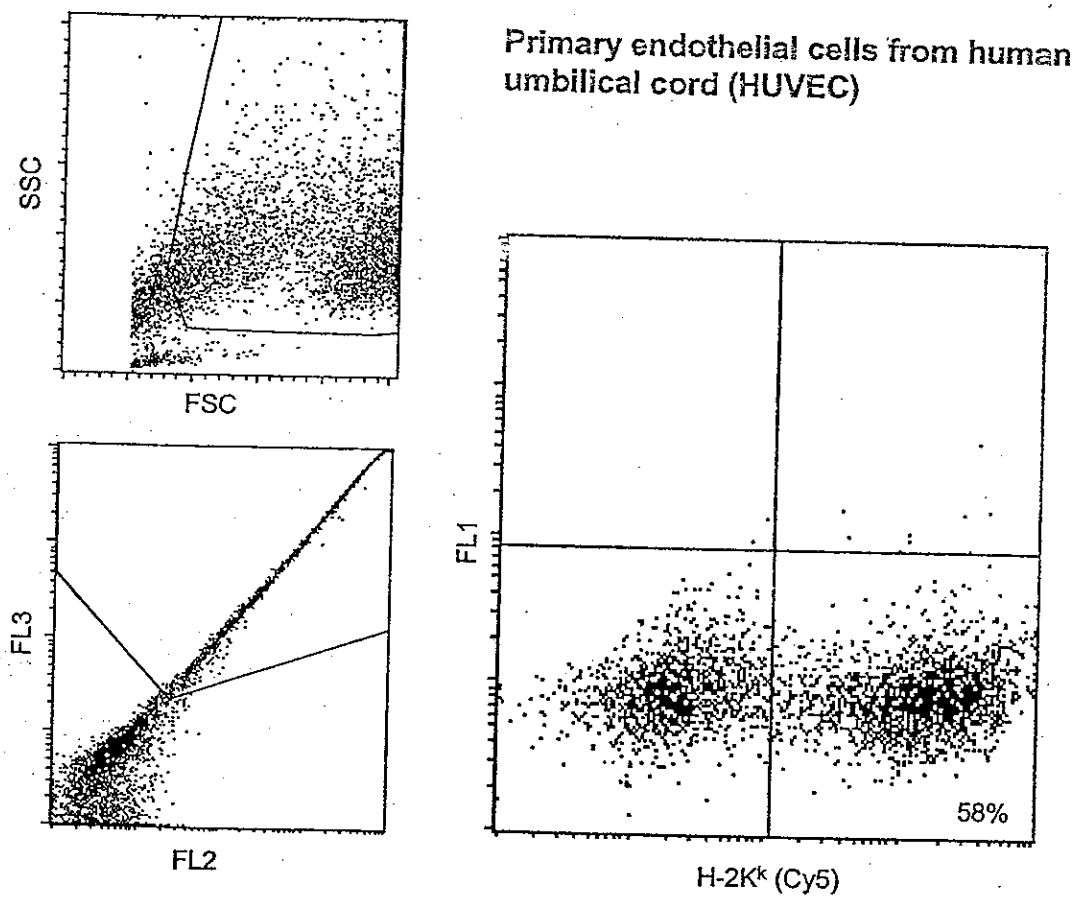

SSC
FSC
FL3
FL2
Primary endothelial cells from human umbilical cord (HUVEC)
FL1
58%
H-2K^k (Cy5)

Fig. 5

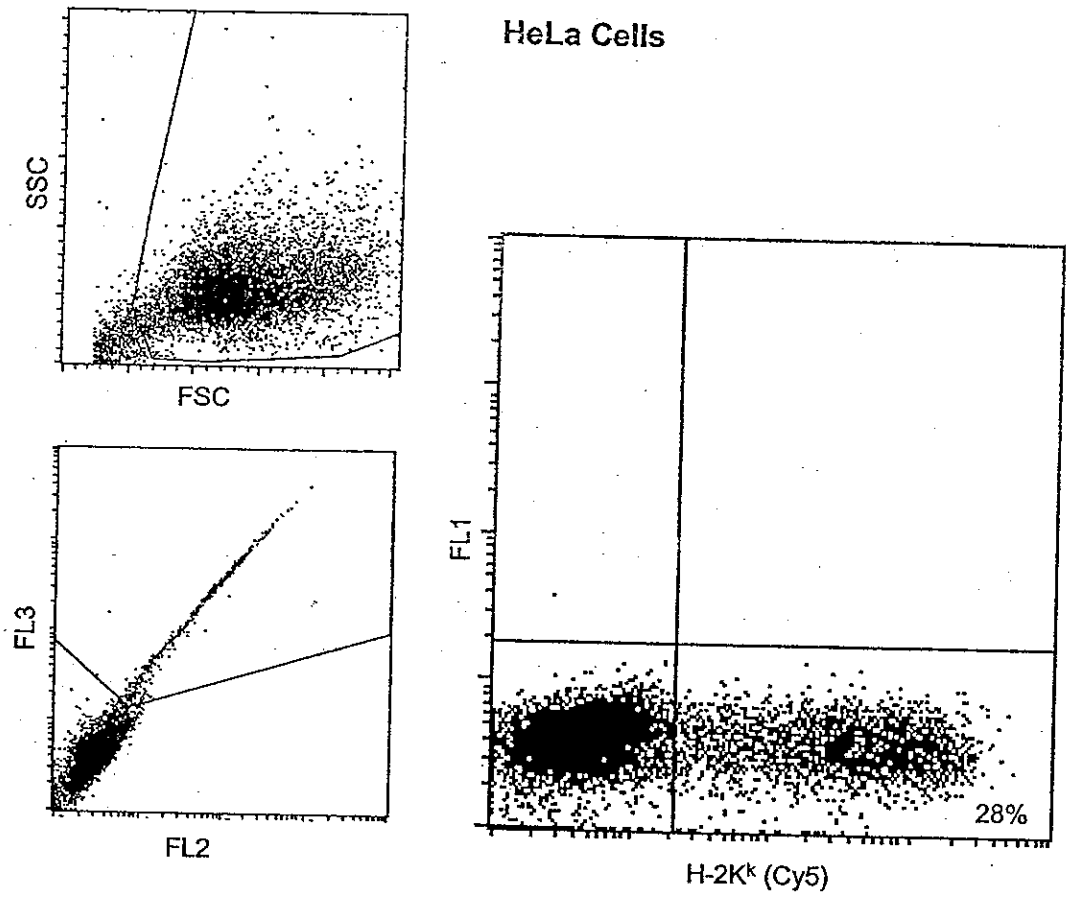
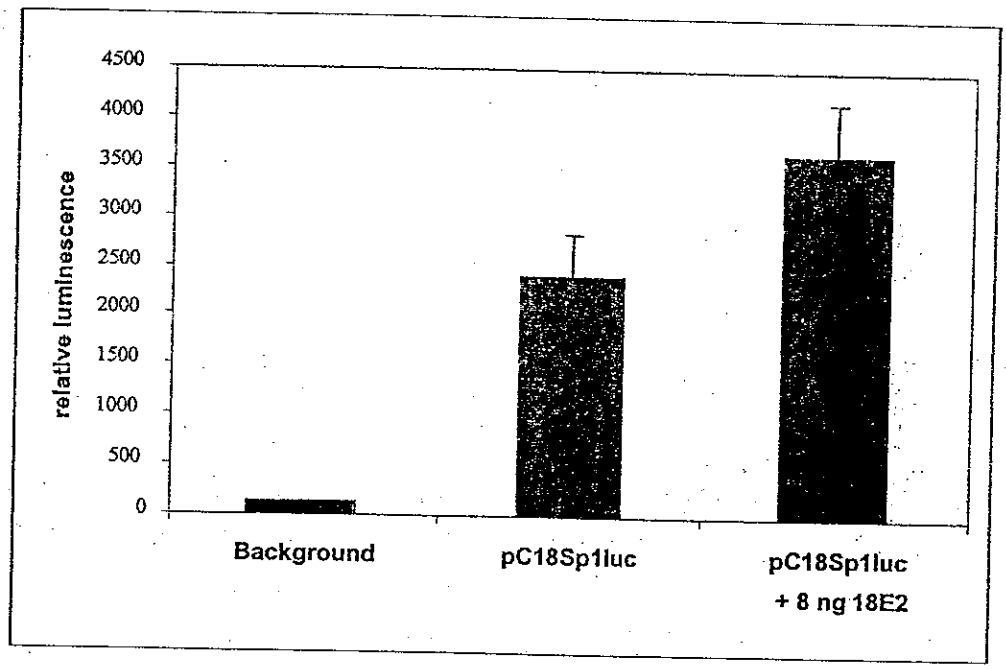
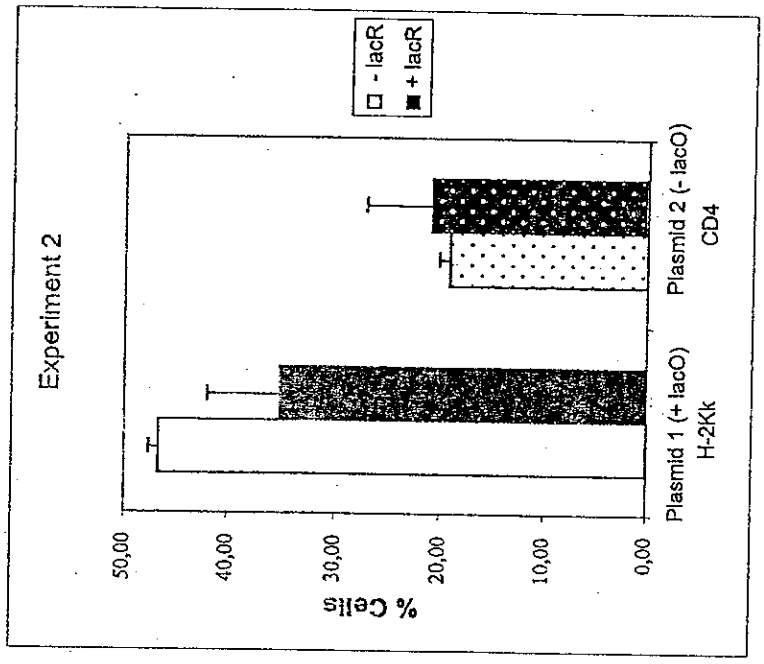


Fig. 6


4500
4000
3500
3000
2500
2000
1500
1000
500
0
relative luminescence
Background
pC18Sp1luc
pC18Sp1luc
+ 8 ng 18E2


Experiment 2
□ - lacR
■ + lacR
% Cells
50,00
40,00
30,00
20,00
10,00
0,00
Plasmid 1 (+ lacO)
H-2Kk
Plasmid 2 (- lacO)
CD4

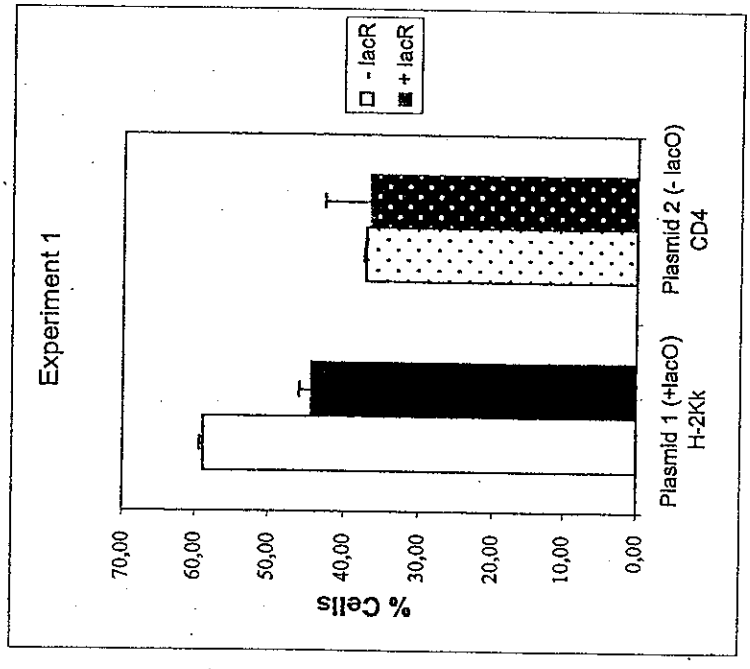
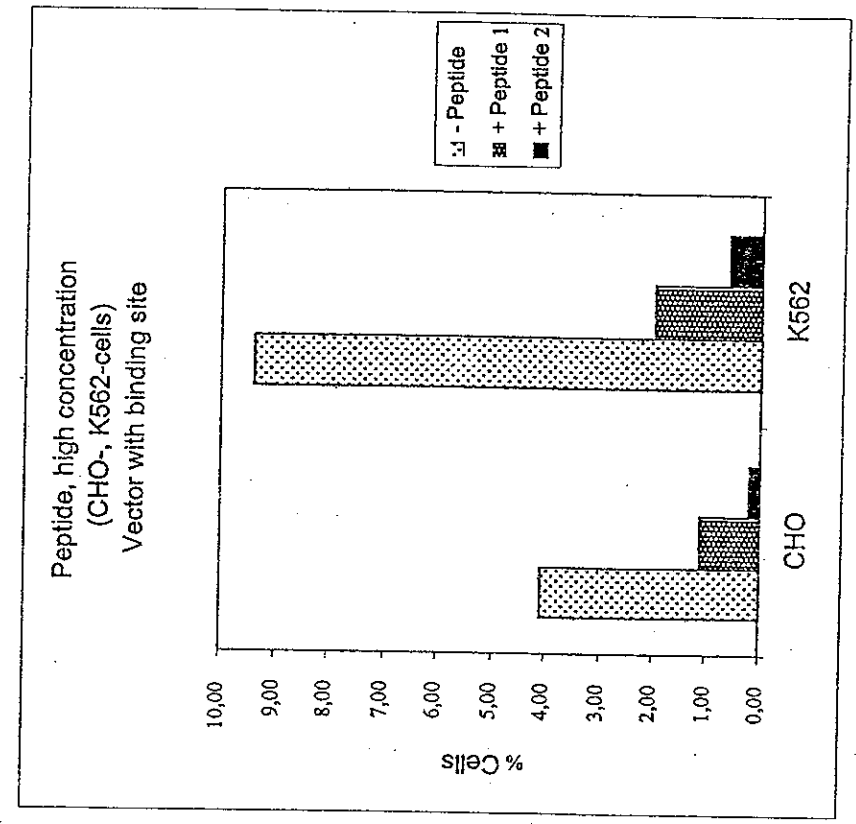
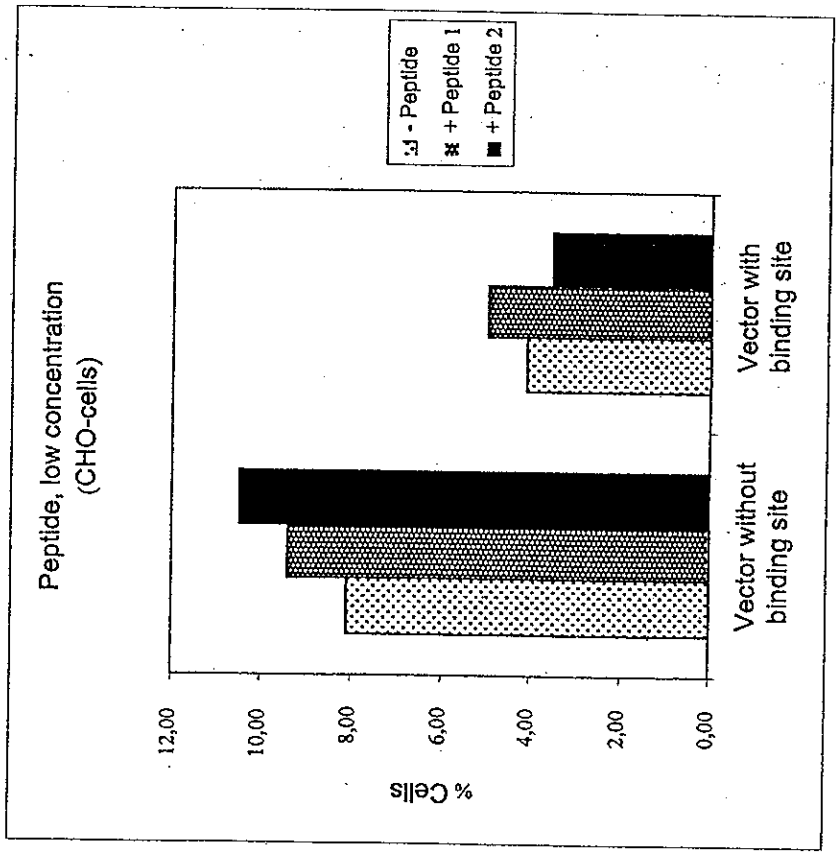

Experiment 1
□ - lacR
■ + lacR
% Cells
70,00
60,00
50,00
40,00
30,00
20,00
10,00
0,00
Plasmid 1 (+lacO)
H-2Kk
Plasmid 2 (- lacO)
CD4

Fig. 7

Fig. 8


Peptide, high concentration
(CHO-, K562-cells)
Vector with binding site
- Peptide
+ Peptide 1
+ Peptide 2
% Cells
10,00
9,00
8,00
7,00
6,00
5,00
4,00
3,00
2,00
1,00
0,00
CHO
K562


Peptide, low concentration
(CHO-cells)
- Peptide
+ Peptide 1
+ Peptide 2
% Cells
12,00
10,00
8,00
6,00
4,00
2,00
0,00
Vector without binding site
Vector with binding site