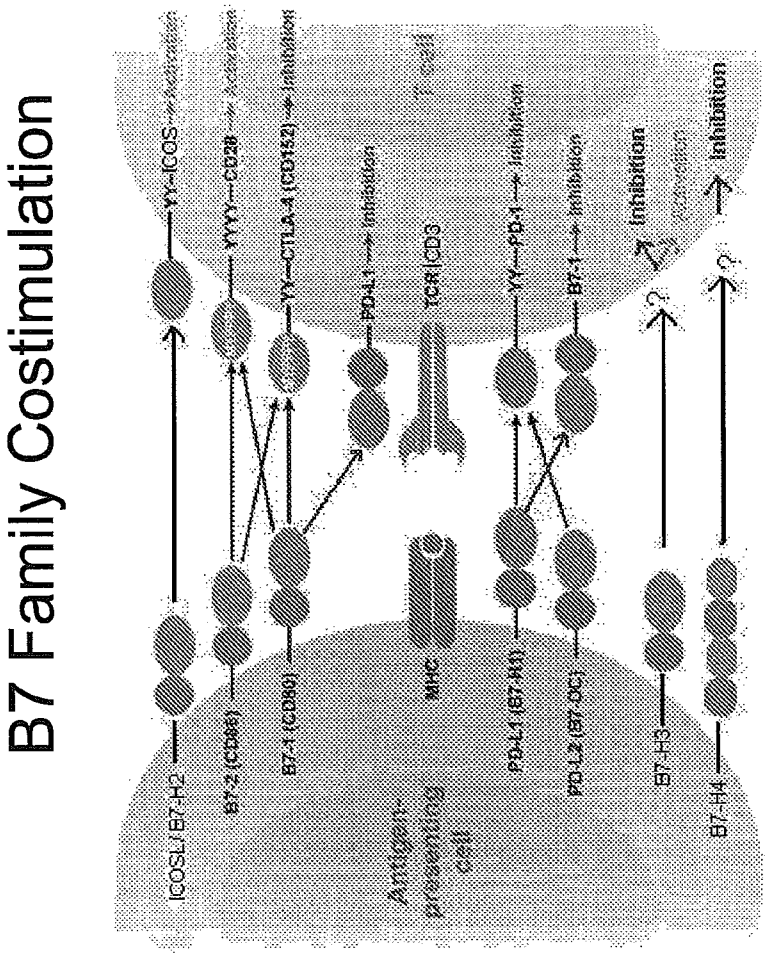

B7 Family Costimulation
ICOSL|B7-H2
B7-2 (CD86)
B7-1 (CD80)
Antigen-presenting cell
MHC
TCR|CD3
PD-L1 (B7-H1)
PD-L2 (B7-DC)
B7-H3
B7-H4
YY—ICOS → Activation
YYY—CD28 → Activation
YY—CTLA-4 (CD152) → Inhibition
PD-1 → Inhibition
YY—PD-1 → Inhibition
B7-1 → Inhibition
Inhibition
Activation
Inhibition
T cell

Figure 1

PMEL/B16 *in vitro* assay

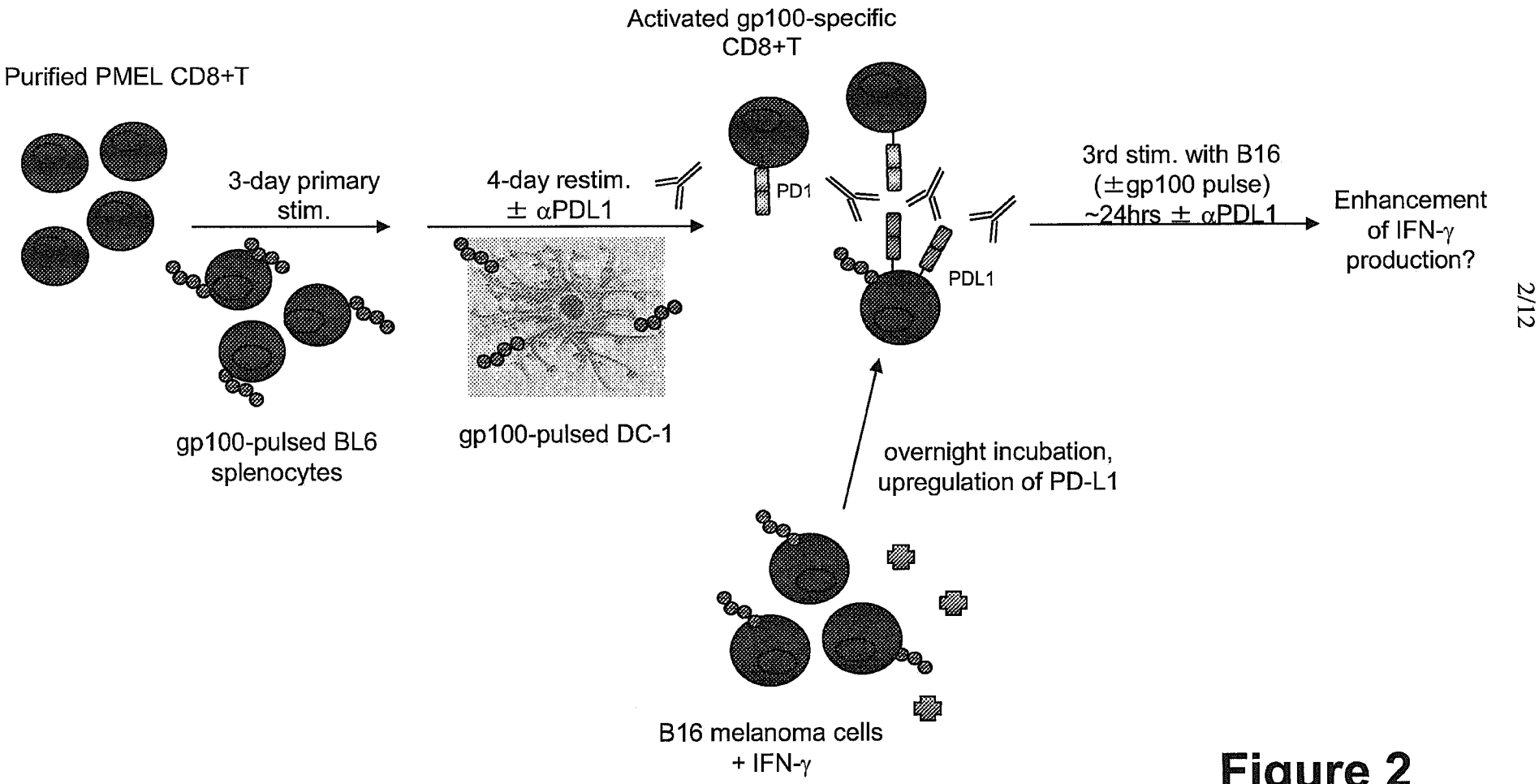


Figure 2

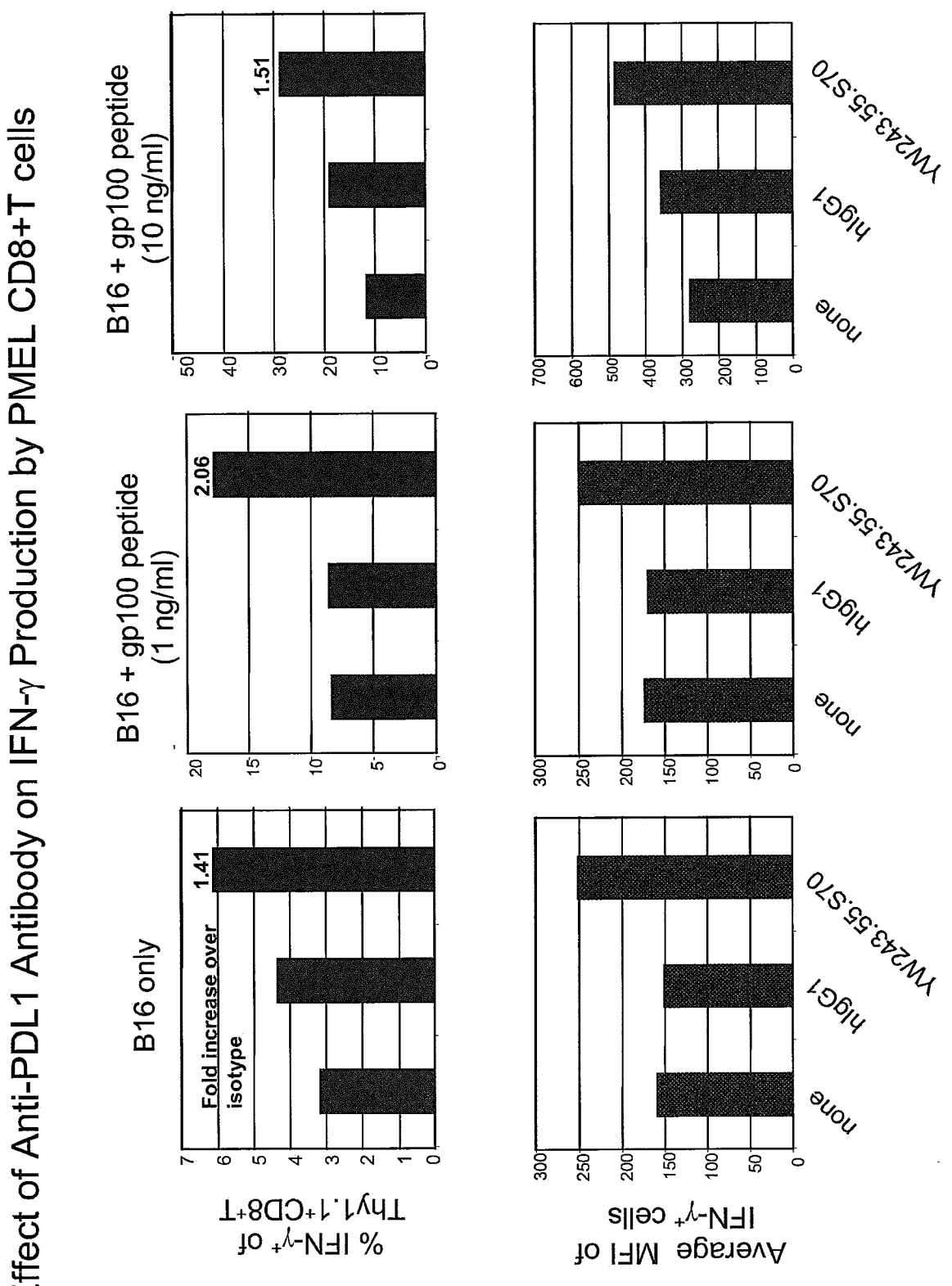

Effect of Anti-PDL1 Antibody on IFN-γ Production by PMEL CD8+T cells
B16 only
B16 + gp100 peptide (1 ng/ml)
B16 + gp100 peptide (10 ng/ml)
Fold increase over isotype
1.41
2.06
1.51
% IFN-γ+ of Thy1.1+CD8+T
Average MFI of IFN-γ+ cells
none
hIgG1
YW243.55.S70

Figure 3

Effect of Anti-PD-L1 antibody on CD4-T Cell proliferation undergoing secondary stimulation

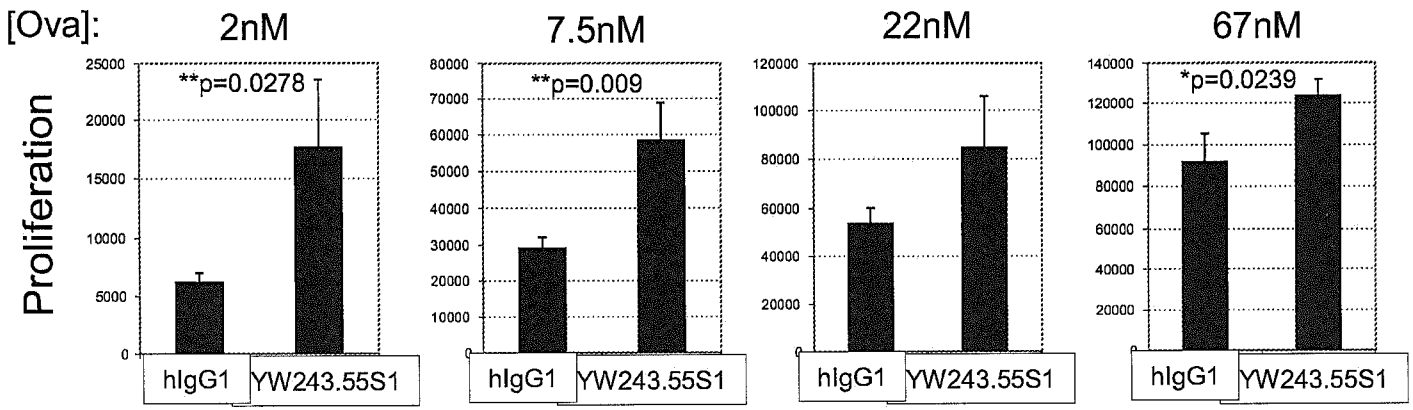


Figure 4

Effect of Anti-PD-L1 Ab on proliferation of human CD8 T cells in Mixed Lymphocyte Reaction

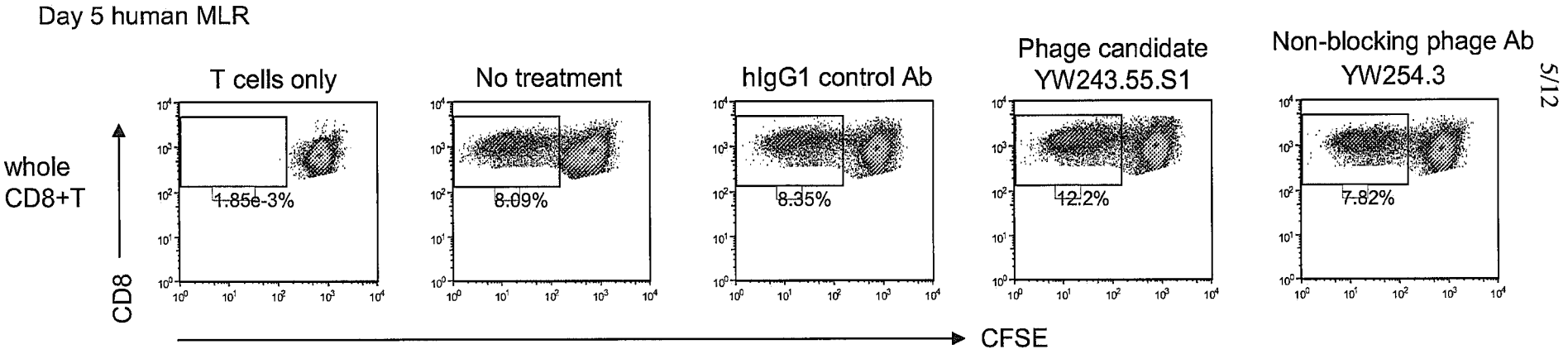


Figure 5

Anti-PDL1 in Chronic Lymphocytic Choriomeningitis Virus (LCMV) infection (Clone 13)

Groups:
- Clone 13 LCMV Chronic strain (2E6/mouse)
  1. IgG1 control: n=5 mice
  2. anti-PD-L1 YW243.55.S70 H/m: n=5 mice

- Armstrong acute strain LCMV (2E6/mouse)
- Uninfected

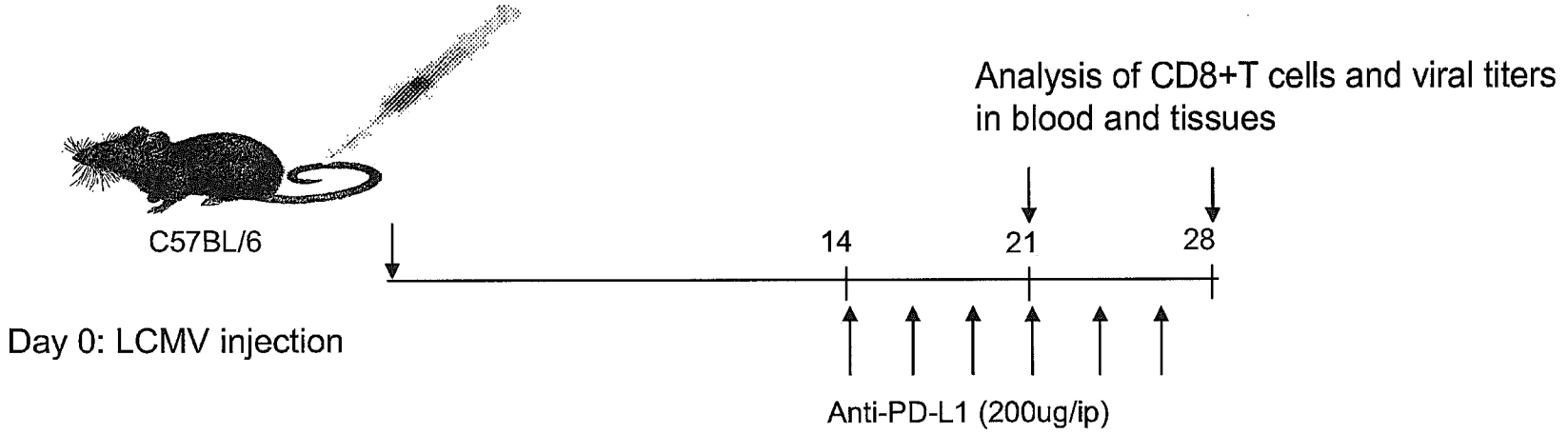


Figure 6

Effect of Anti-PD-L1 Ab on CD8 effector function in anti-PDL1 treated mice

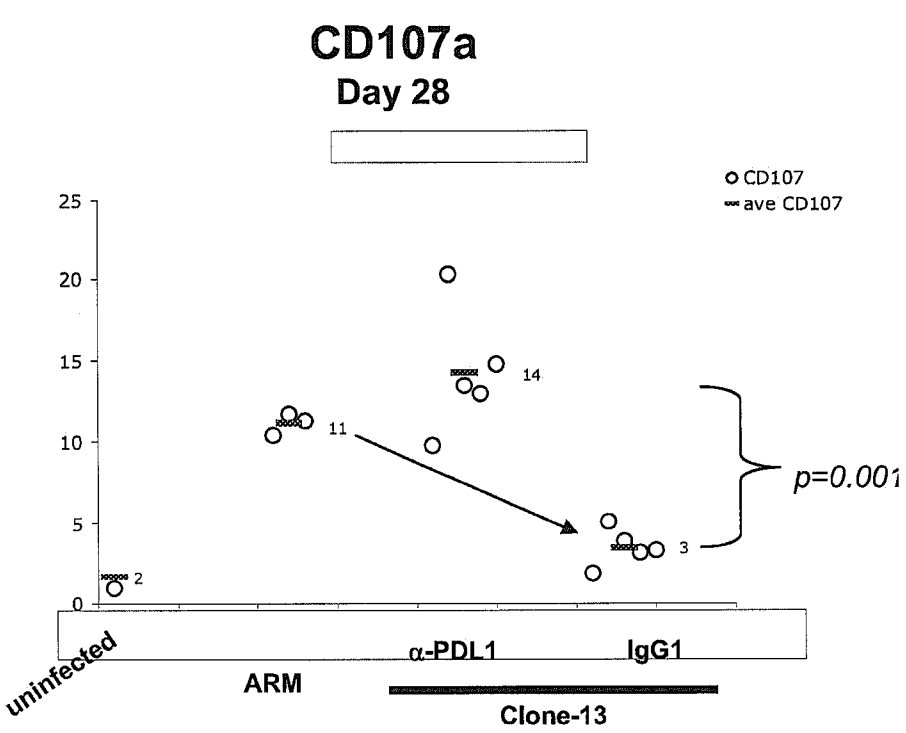


Figure 7A

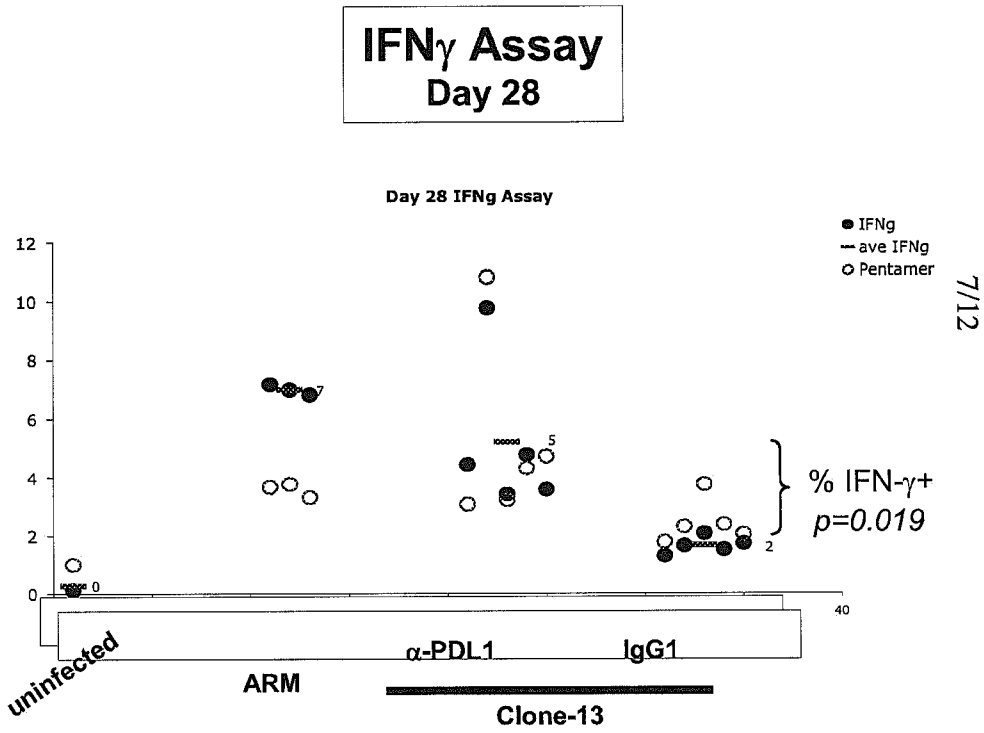
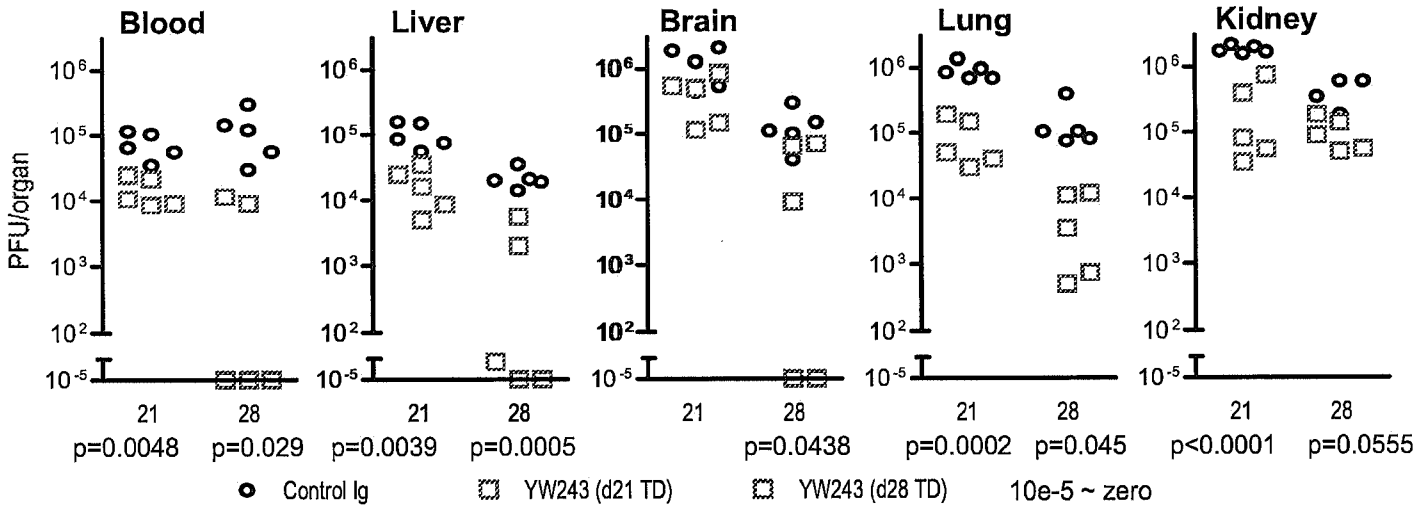


Figure 7B

Reduction of viral titers in serum and tissues in α-PD-L1 treated mice



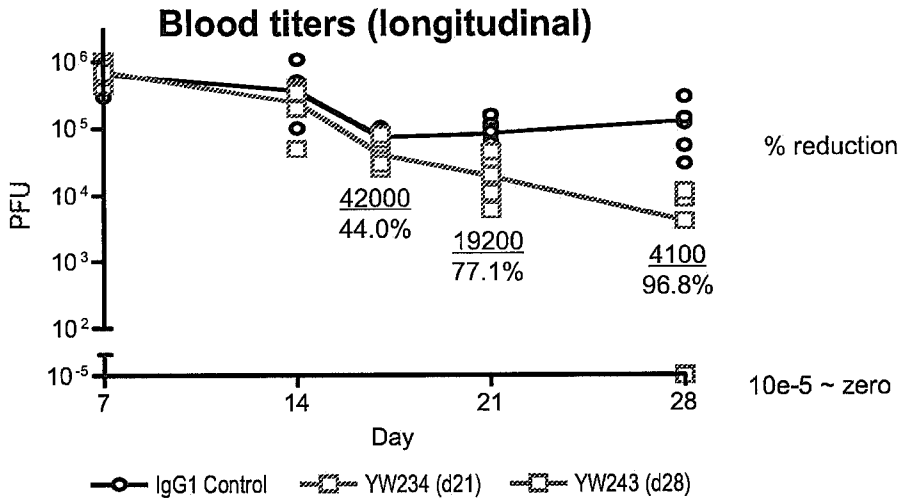


Figure 8

Effect of late intervention with anti-PDL1 treatment in MC38.Ova colorectal model

MC38-Ova cells express PD-L1

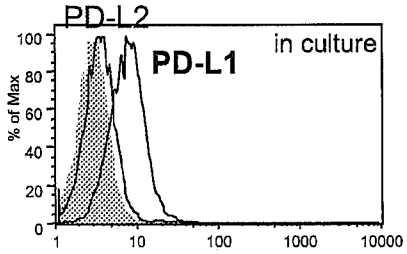


Figure 9B

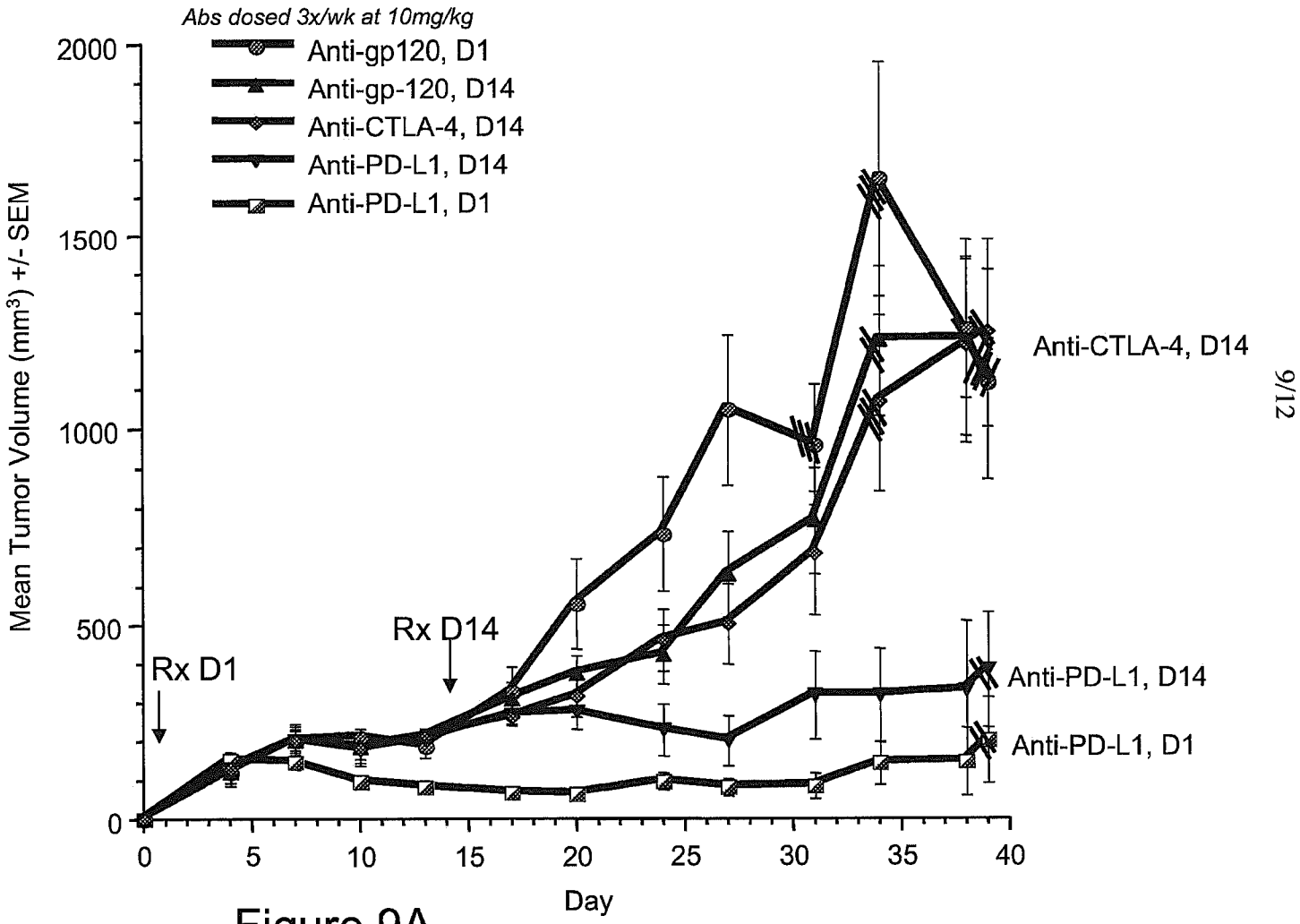
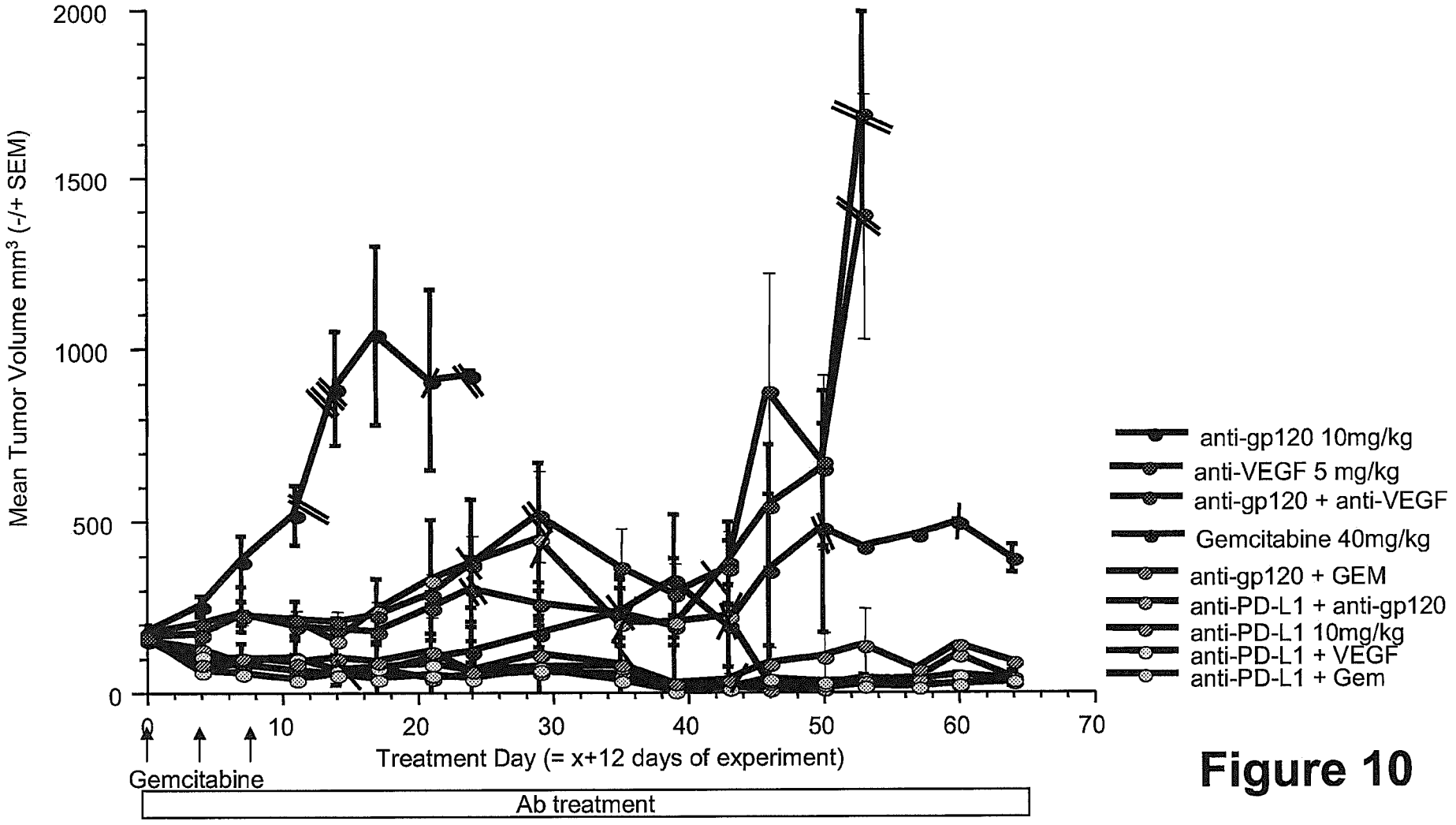


Figure 9A

Effect of treament from PD-L1 blockade alone and in combination with anti-VEGF or Gemcitabine



10/12

Figure 10

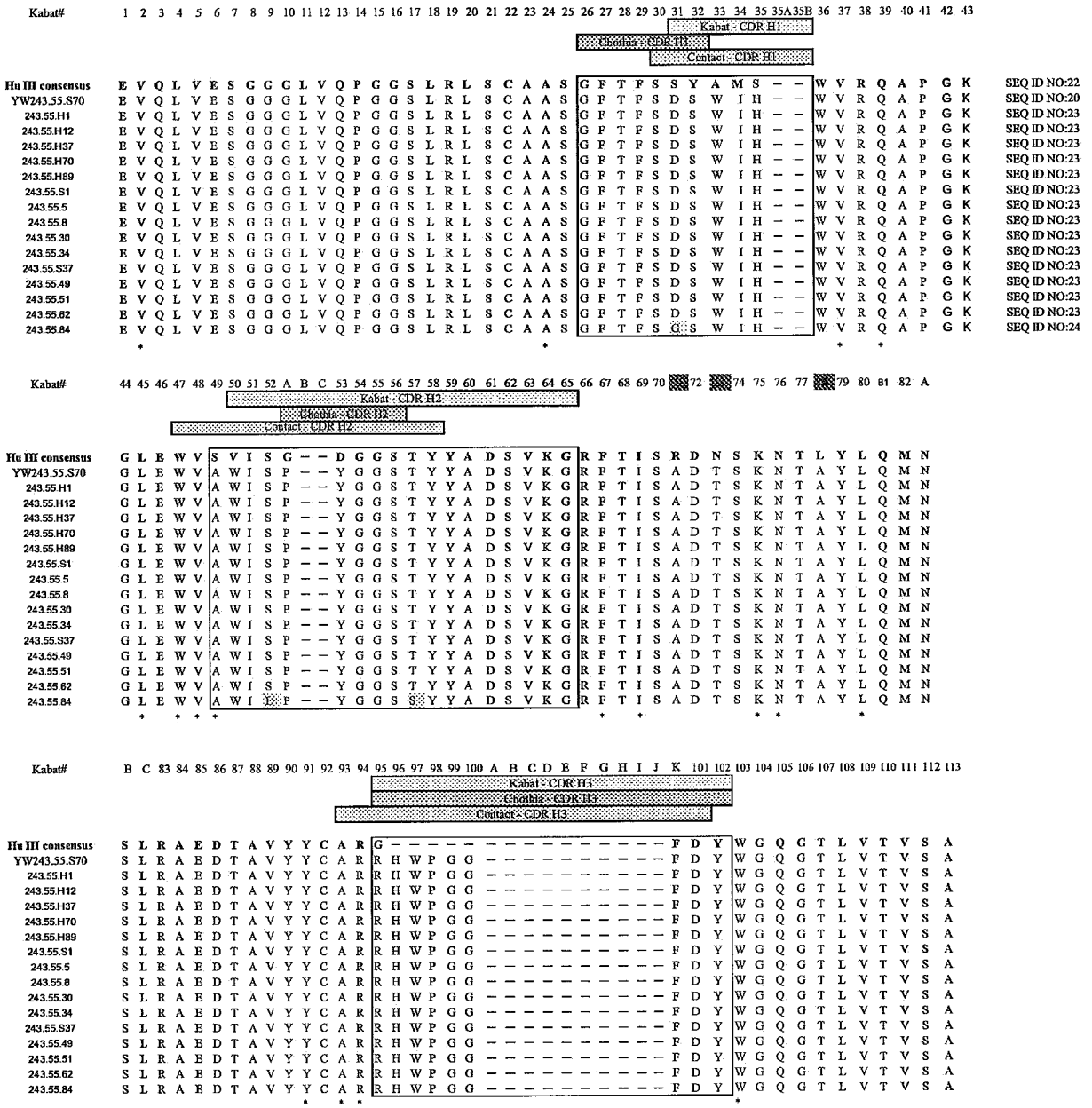

Kabat#
Kabat - CDR H1
Chothia - CDR H1
Contact - CDR H1
Hu III consensus
YW243.55.S70
243.55.H1
243.55.H12
243.55.H37
243.55.H70
243.55.H89
243.55.S1
243.55.5
243.55.8
243.55.30
243.55.34
243.55.S37
243.55.49
243.55.51
243.55.62
243.55.84
SEQ ID NO:22
SEQ ID NO:20
SEQ ID NO:23
SEQ ID NO:24
Kabat - CDR H2
Chothia - CDR H2
Contact - CDR H2
Kabat - CDR H3
Chothia - CDR H3
Contact - CDR H3

Figure 11A

Light Chains

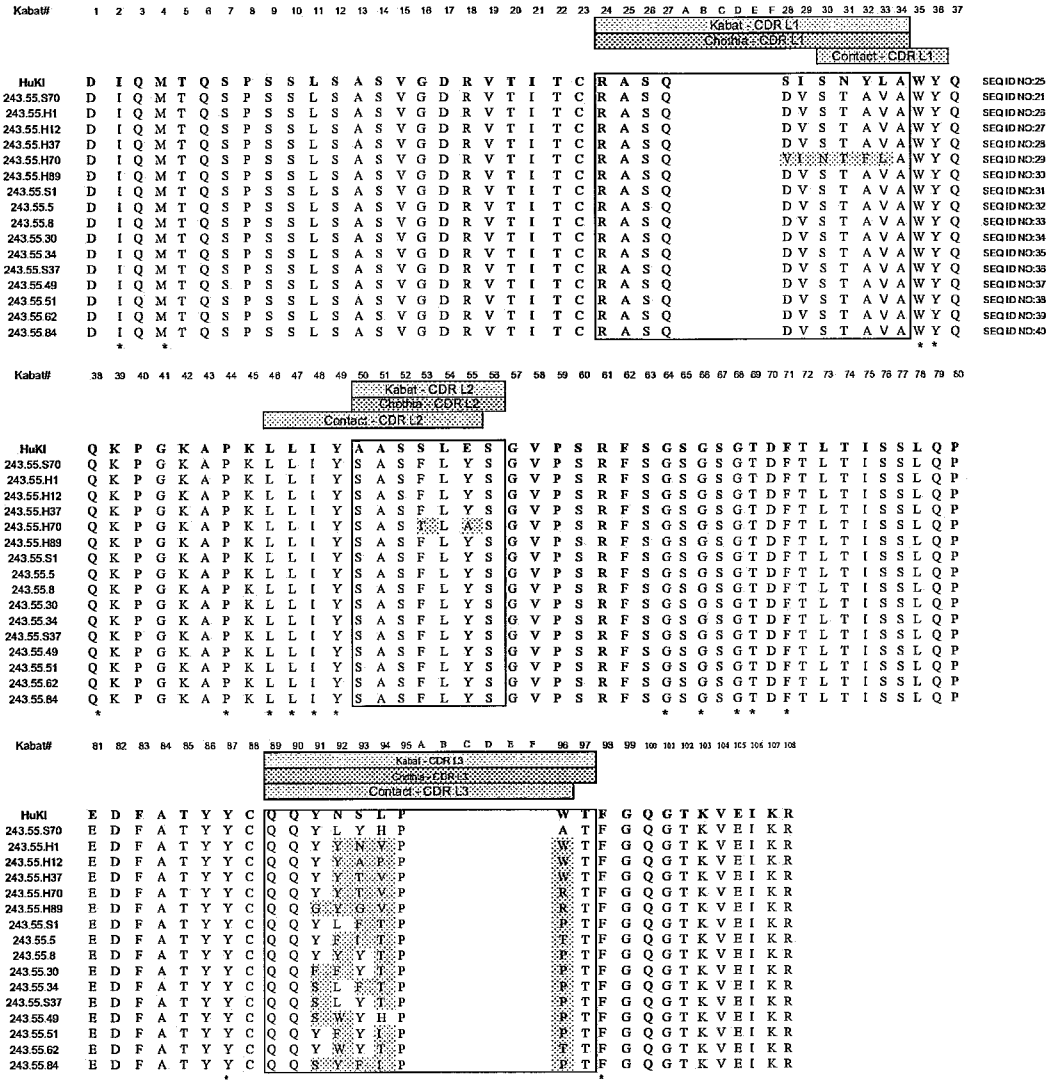


FIGURE 11B