Supplemental Data

Figure S1. Linear depiction of lentiviral constructs containing IL-15, IL-15Rα, and CD80.

Figure S2. 32Dp210 leukemia suppresses adaptive immune effector populations and increases immunosuppressive cell types in the spleens of leukemia-bearing mice. The frequency of different immune effector populations in the spleen were analyzed by flow cytometric analyses in normal, naive C3H mice, and 14 days after leukemia inoculation, in 32Dp210 leukemia-bearing mice (32Dp210-AML). The percentage of each cell type in each subject are indicated. (A) percent CD3+CD4+ T cells, (B) percent CD4+CD8+ T cells, (C) frequency of $CD44^{hi}$ CD3+CD4+ T cells, (D) frequency of $CD44^{hi}$ CD3+CD8+ T cells, (E) percent CD4+FoxP3+ T regulatory cells (T_{REG}), and (F) percent CD11b+Ly6G+ myeloid derived suppressor cells (MDSC). *p<0.05, **p<0.01, ***p<0.001; Error bars = S.E.M.

Figure S3. 32Dp210 leukemia decreases the absolute numbers of adaptive immune effector populations and increases the numbers of immunosuppressive cell types in the spleens of leukemia-bearing mice. Changes in the absolute numbers of immune effector populations and the percentages detected for CD4+FoxP3+ T regulatory cells (T_{REG}), percent CD11b+Ly6G+ myeloid derived suppressor cells (MDSC), percent CD3+CD4+ T cells, and percent CD4+CD8+ T cells, similar to those shown in **Supplemental Data B**, were observed.

Table S1: GCV treatment has no major effects on cell populations in peripheral blood. After administration of 100 mg/kg GCV daily for 14 days in non-tumor bearing C3H mice, complete blood counts and analyses of different populations in peripheral blood were compared with those of mice treated with PBS as controls.

Figure S1.

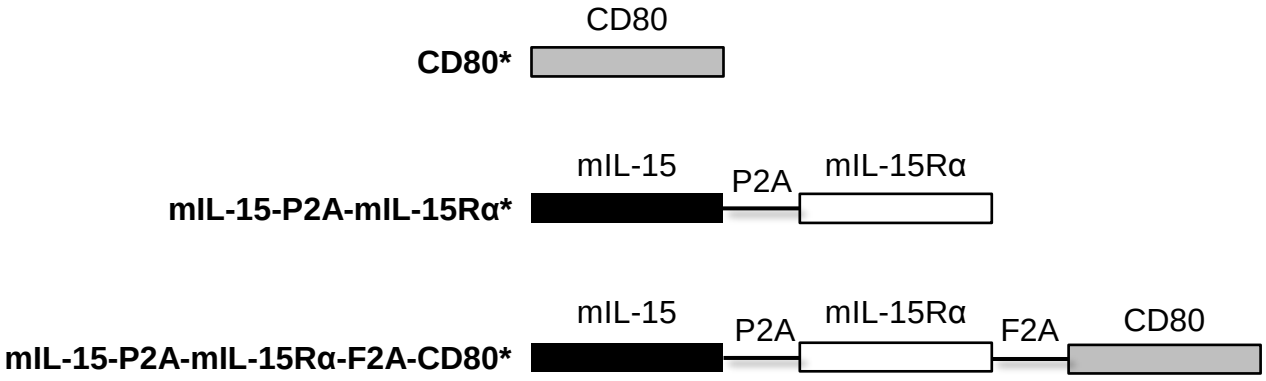

CD80
CD80*
mIL-15
P2A
mIL-15Rα
mIL-15-P2A-mIL-15Rα*
mIL-15
P2A
mIL-15Rα
F2A
CD80
mIL-15-P2A-mIL-15Rα-F2A-CD80*

Figure S2

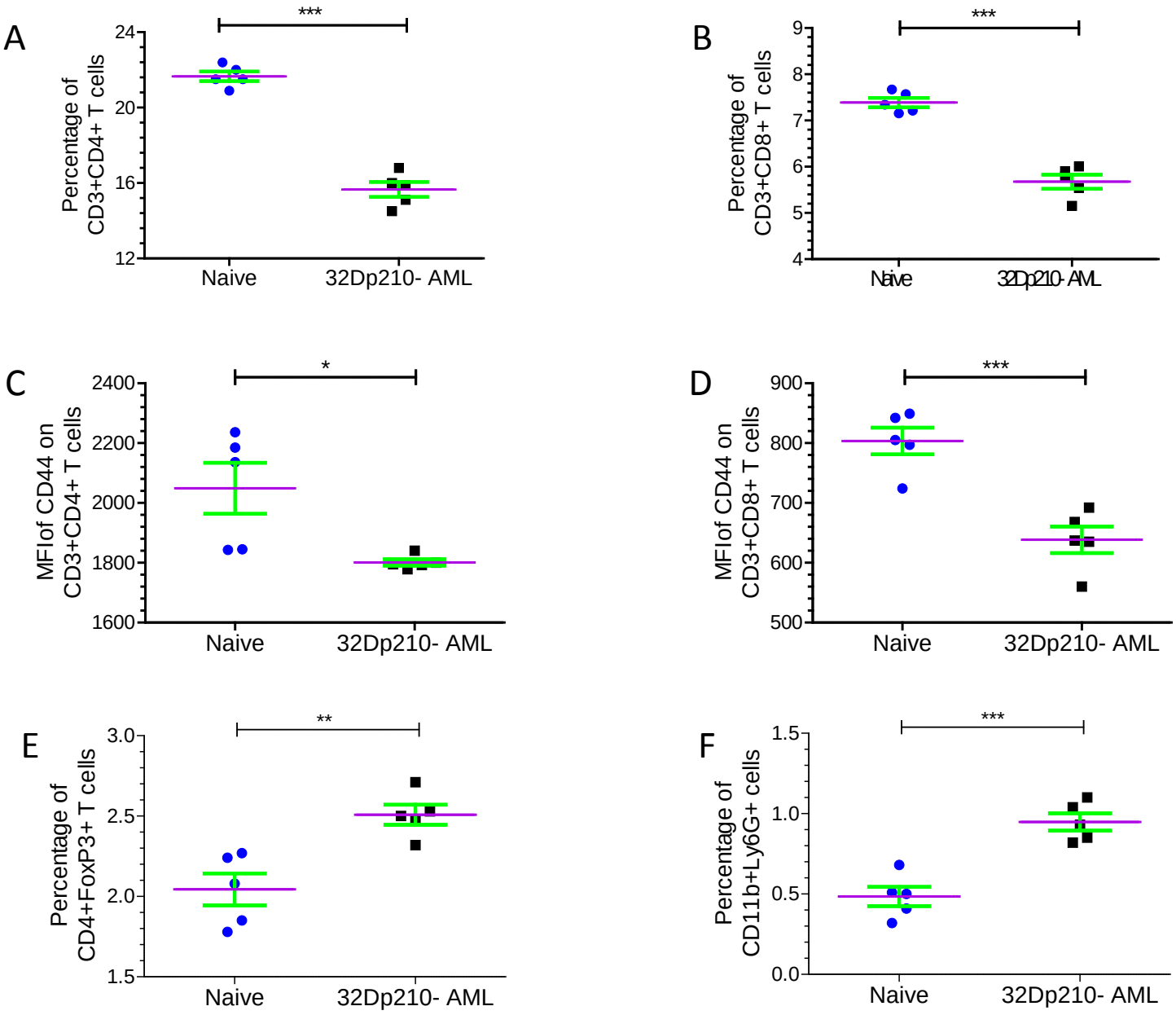
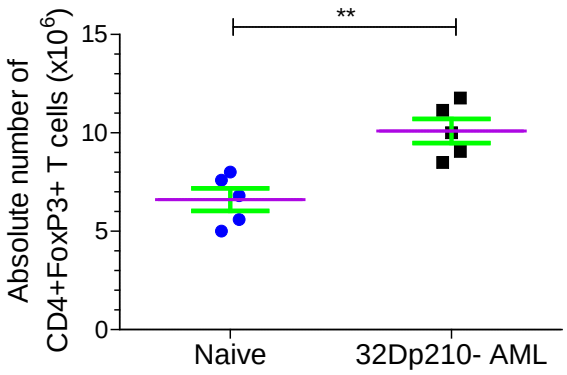
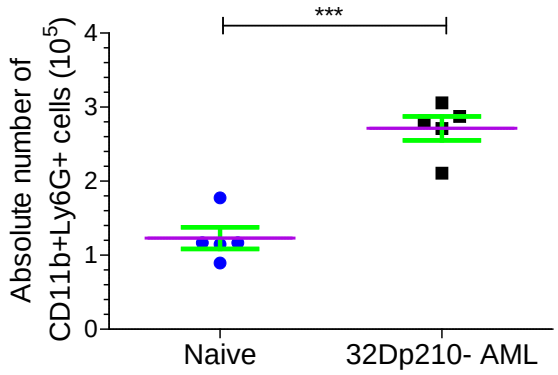
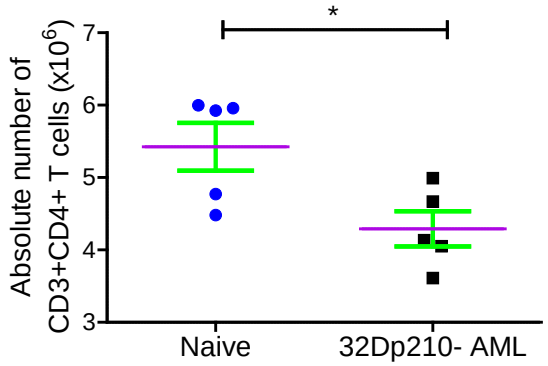

A
***
Percentage of CD3+CD4+ T cells
24
20
16
12
Naive
32Dp210- AML
B
***
Percentage of CD3+CD8+ T cells
9
8
7
6
5
4
Naive
32Dp210- AML
C
*
MFIof CD44 on CD3+CD4+ T cells
2400
2200
2000
1800
1600
Naive
32Dp210- AML
D
***
MFIof CD44 on CD3+CD8+ T cells
900
800
700
600
500
Naive
32Dp210- AML
E
**
Percentage of CD4+FoxP3+ T cells
3.0
2.5
2.0
1.5
Naive
32Dp210- AML
F
***
Percentage of CD11b+Ly6G+ cells
1.5
1.0
0.5
0.0
Naive
32Dp210- AML

Figure S3


**
Absolute number of CD4+FoxP3+ T cells (x10^6)
15
10
5
0
Naive
32Dp210- AML


***
Absolute number of CD11b+Ly6G+ cells (10^5)
4
3
2
1
0
Naive
32Dp210- AML


*
Absolute number of CD3+CD4+ T cells (x10^6)
7
6
5
4
3
Naive
32Dp210- AML

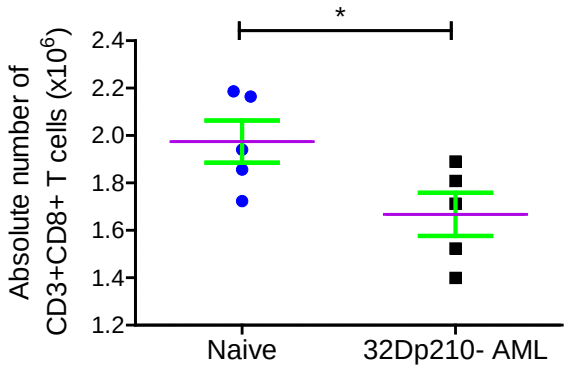

*
Absolute number of CD3+CD8+ T cells (x10^6)
2.4
2.2
2.0
1.8
1.6
1.4
1.2
Naive
32Dp210- AML

Table S1

Table 1: Effect of GCV on CBC

(k/μL)	PBS	GCV	P-value
White Blood Cells	8.512 ± 0.610	6.638 ± 0.575	0.064
Neutrophils	4.068 ± 0.568	4.141 ± 0.580	0.938
Lymphocytes	3.682 ± 0.208	2.036 ± 0.279	0.002
Monocytes	0.5100 ± 0.077	0.310 ± 0.0364	0.018