Figure S1. Expression of CCR6 and CCR10 ligands in inflamed epithelia of tonsil, and psoriatic and viral skin lesions and colocalization with pDC

Immunohistochemical stainings on 6 µm acetone fixed sections of tonsils, psoriatic skin, and biopsies of *verrucae vulgaris* showing CCL20 (A, C, and D) and CCL27 (B, D, and F) (red) in epithelial sites together with $CD123^+$ pDC (blue) at the magnification x 20. In the insert box, the magnification is x 40 and these stainings are representative of 3 independent patients.

Figure S2. Analysis of immune cell infiltrate in B16 tumors in WT and CCR6-deficient mice

(A) Shown are the percentages of $CD45^+$ cells infiltrating B16 tumors treated with vehicle or aldara cream in B6 mice. Symbols represent individual mice (n = 7-8); bars show mean values. (B) Gating strategy to identify pDC as $CD11c^+$ $CD11b^-$ $B220^+$ $BST2^+$ among CD45-MACS sorted immune cells from aldara-treated B16 tumors in B6 mice. Percentages of gated populations are indicated. (C) Shown are numbers of $CD45^+$ and (D) $CD11c^+$ cells among total viable tumor cells between WT animals and CCR6-deficient animals treated with Aldara (n = 9 animals). Symbols represent individual mice (n = 9); bars show mean values. Statistical significance was obtained with a non-parametric Wilcoxon test.

Figure S3. Distribution of pDC in lymphoid tissues

Shown are the percentages (upper panels) and numbers (lower panels) of pDC isolated from the liver, lymph node, spleen, and bone marrow from B6 (white circles) and CCR6-deficient (black circles) mice. Circles represent individual mice (n = 9); bars show mean values. Statistical significance was obtained with a non-parametric Wilcoxon test.

Figure S4. Time course of CCR6 and CCR10 expression induced on human blood pDC upon IL-3 culture

CCR6 and CCR10 were measured on freshly isolated blood pDC and after 16 h, 24 h, 48 h, and 96 h of culture in the presence of IL-3. The percentage of the positive cell populations is indicated. Data are representative of 3 independent experiments.

Figure S5. Time course of CCR7 and CCR10 expression and responsiveness induced on human blood pDC upon IL-3±CpG-B culture

(A) CCR7 and CCR10 expression and (B) migratory capacities to CCL19 and CCL28 (1 μg/ml) were measured on freshly isolated, IL-3, and IL-3+CpG-B-treated blood pDC at various times after culture by flow cytometry and transwell assay respectively. Percentages of positive cells are indicated in each dot plot (data are representative of 3 independent experiments) and pDC migration is depicted as migration index (mean ± SD for 6 to 10 independent experiments).

Figure S1

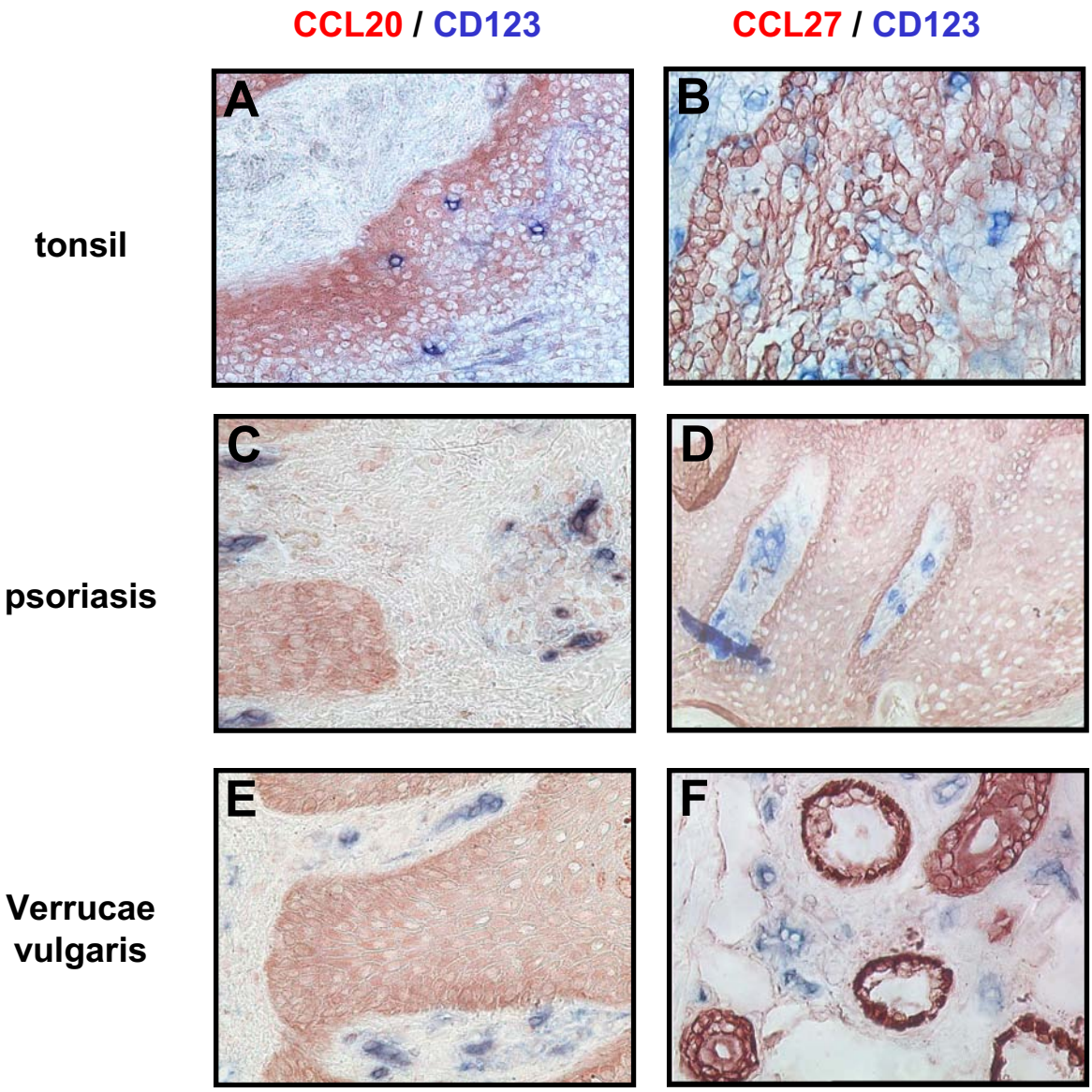

CCL20 / CD123
CCL27 / CD123
tonsil
psoriasis
Verrucae vulgaris
A
B
C
D
E
F

Figure S2

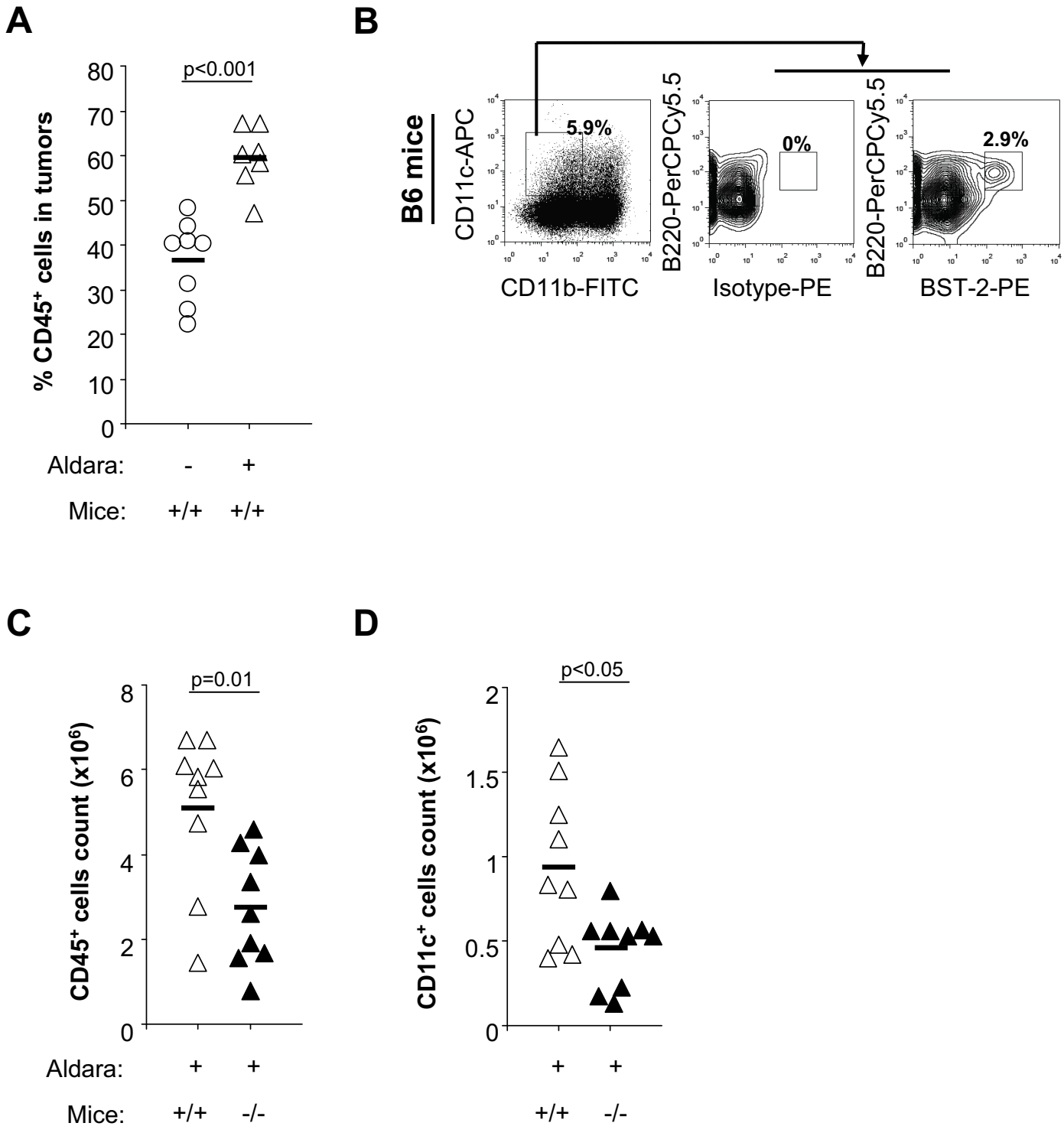

A
p<0.001
% CD45+ cells in tumors
80
70
60
50
40
30
20
10
0
Aldara: - +
Mice: +/+ +/+
B
B6 mice
CD11c-APC
5.9%
CD11b-FITC
B220-PerCPCy5.5
0%
Isotype-PE
B220-PerCPCy5.5
2.9%
BST-2-PE
C
p=0.01
CD45+ cells count (x10^6)
8
6
4
2
0
Aldara: + +
Mice: +/+ -/-
D
p<0.05
CD11c+ cells count (x10^6)
2
1.5
1
0.5
0
+ +
+/+ -/-

Figure S3

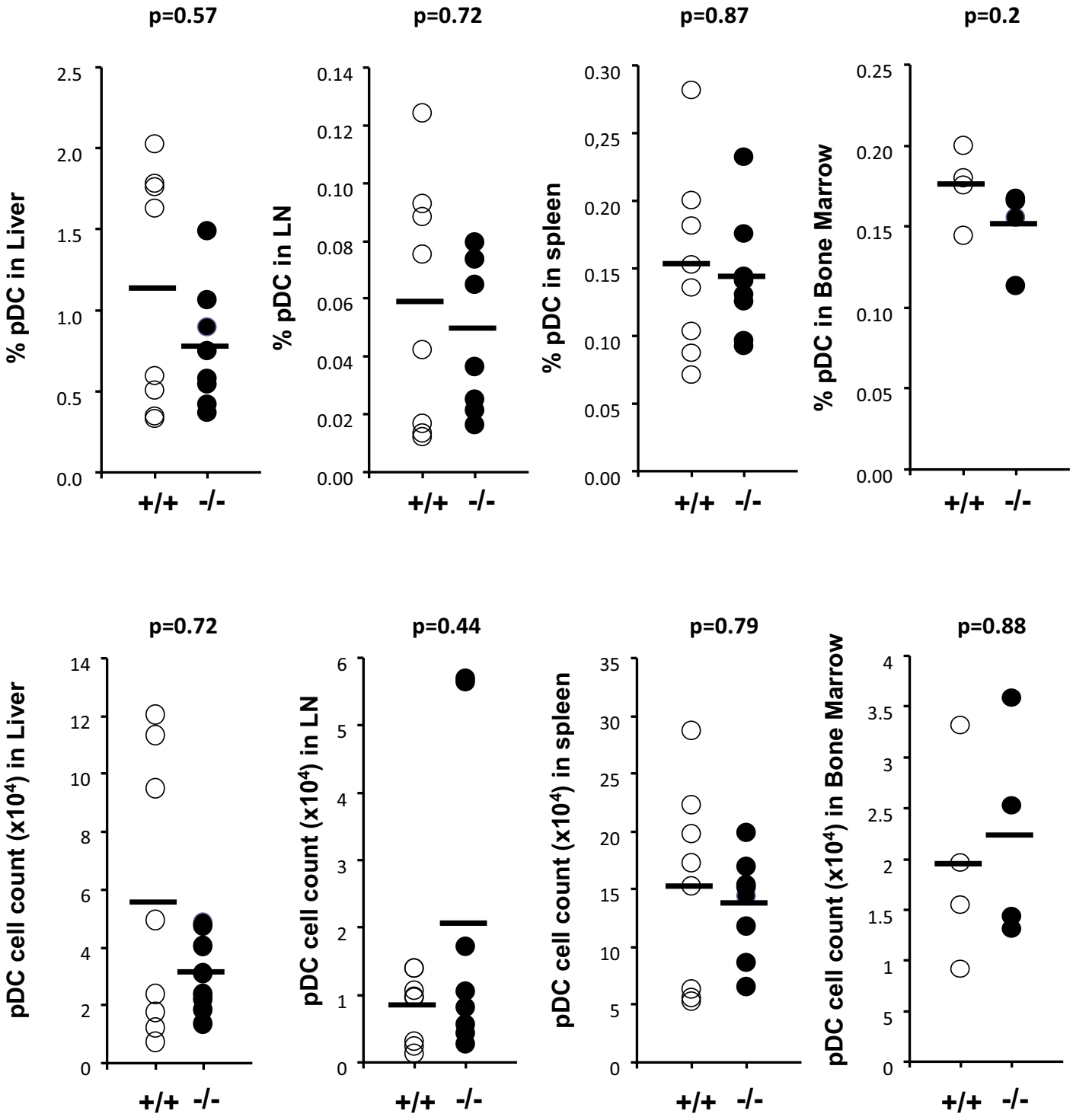

p=0.57
% pDC in Liver
2.5
2.0
1.5
1.0
0.5
0.0
+/+
-/-
p=0.72
% pDC in LN
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
+/+
-/-
p=0.87
% pDC in spleen
0.30
0,25
0.20
0.15
0.10
0.05
0.00
+/+
-/-
p=0.2
% pDC in Bone Marrow
0.25
0.20
0.15
0.10
0.05
0.00
+/+
-/-
p=0.72
pDC cell count (x10⁴) in Liver
14
12
10
8
6
4
2
0
+/+
-/-
p=0.44
pDC cell count (x10⁴) in LN
6
5
4
3
2
1
0
+/+
-/-
p=0.79
pDC cell count (x10⁴) in spleen
35
30
25
20
15
10
5
0
+/+
-/-
p=0.88
pDC cell count (x10⁴) in Bone Marrow
4
3.5
3
2.5
2
1.5
1
5
0
+/+
-/-

Figure S4

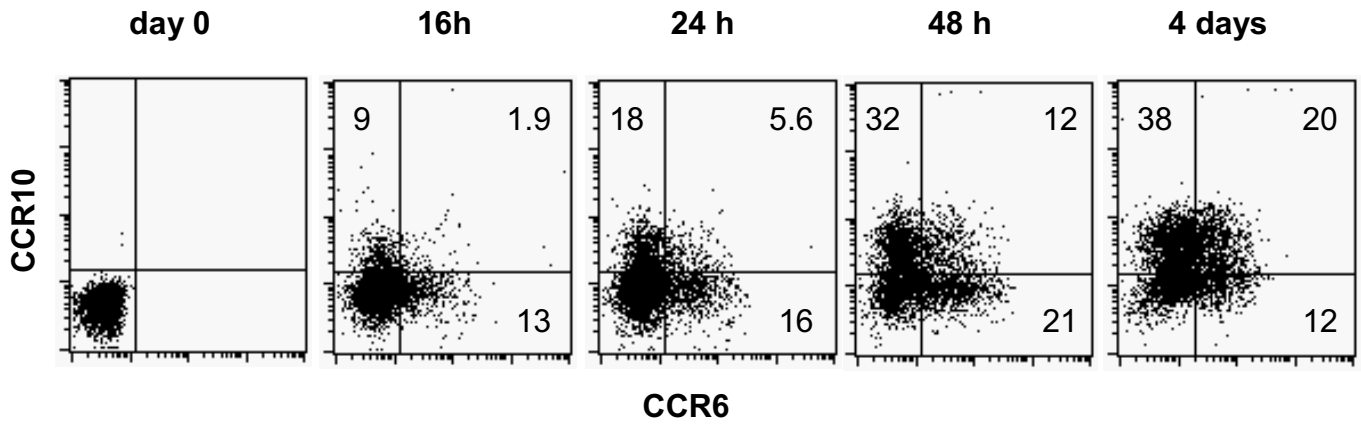
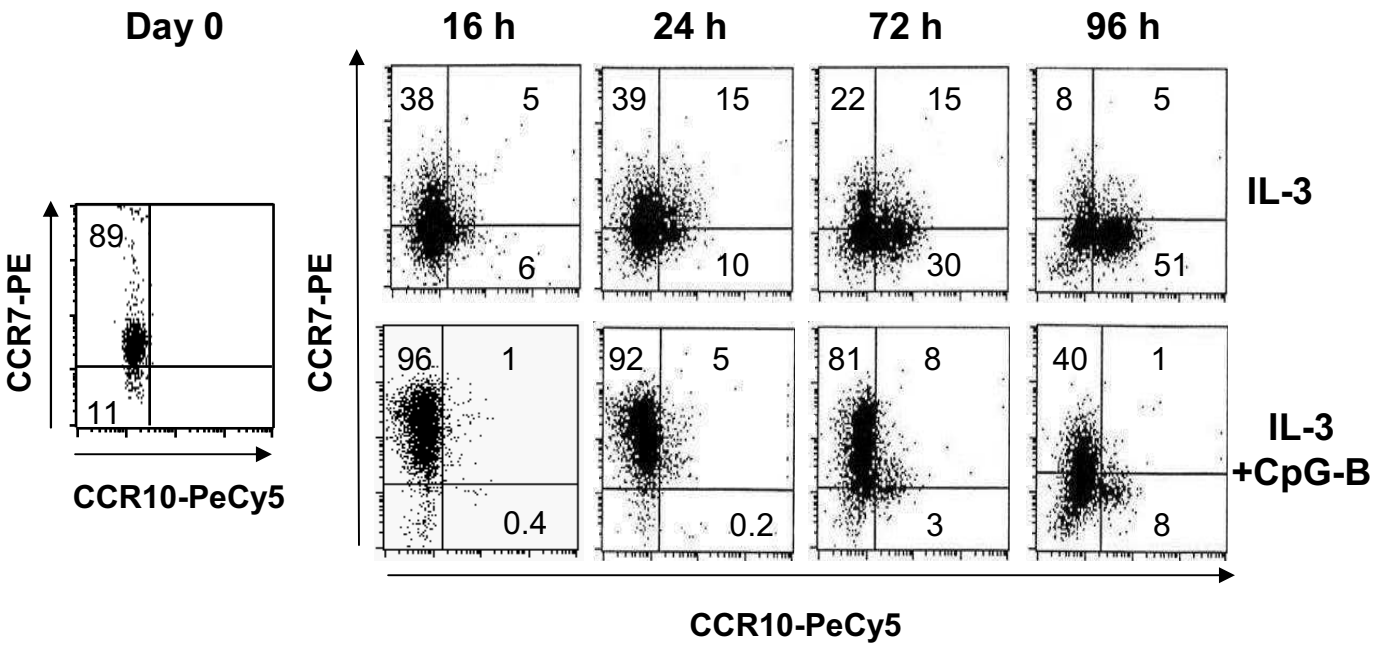
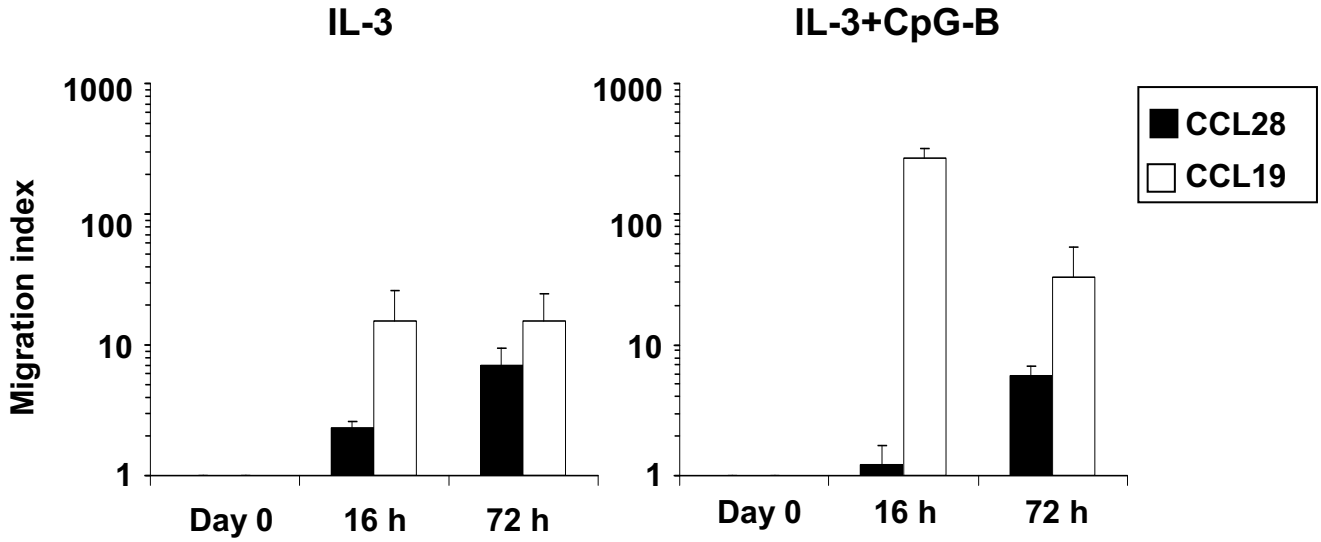

day 0
16h
24 h
48 h
4 days
CCR10
CCR6
9
1.9
13
18
5.6
16
32
12
21
38
20
12

Figure S5

A


Day 0
16 h
24 h
72 h
96 h
89
11
CCR7-PE
CCR10-PeCy5
38
5
6
39
15
10
22
15
30
8
5
51
IL-3
96
1
0.4
92
5
0.2
81
8
3
40
1
8
IL-3
+CpG-B
CCR7-PE
CCR10-PeCy5

B


IL-3
IL-3+CpG-B
Migration index
1000
100
10
1
Day 0
16 h
72 h
CCL28
CCL19