

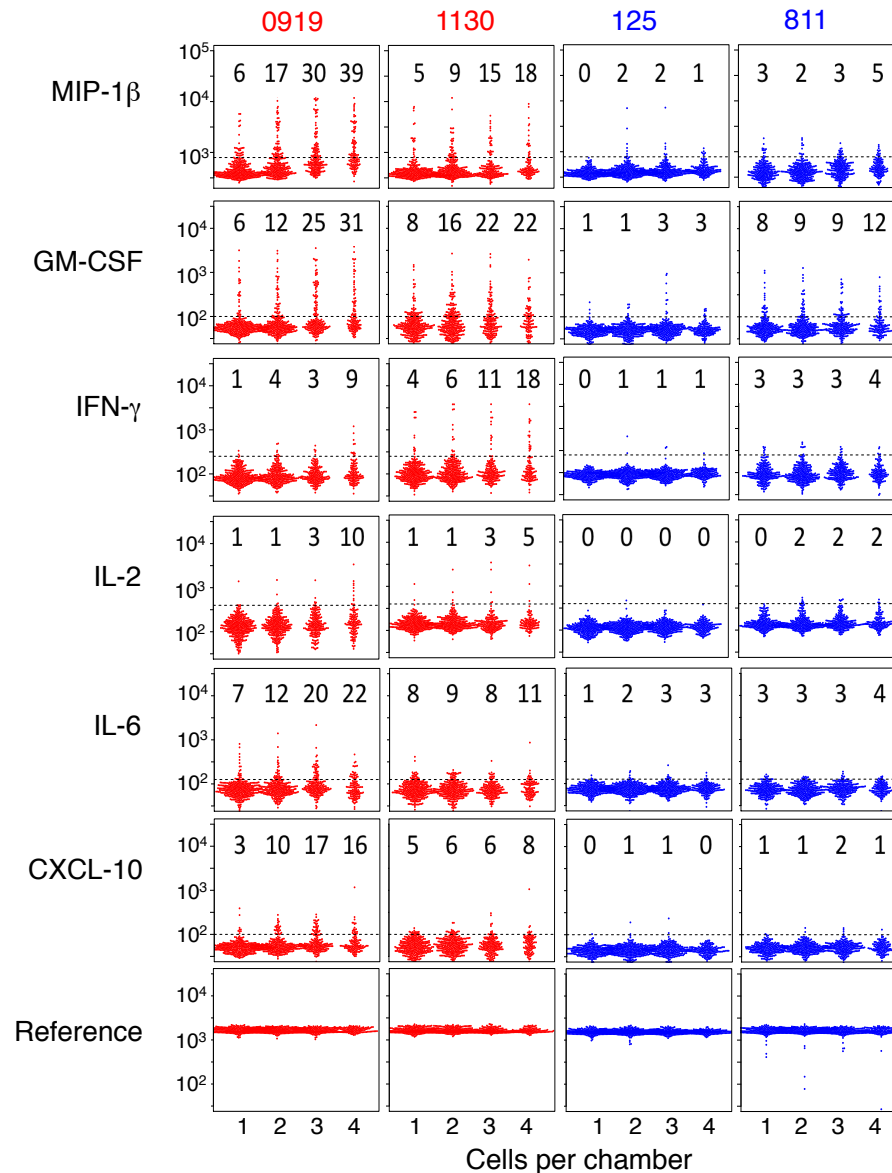
Supplementary Tables

Table S1. Hierarchy in the strength of NK cell education (adapted from ^{1,2})

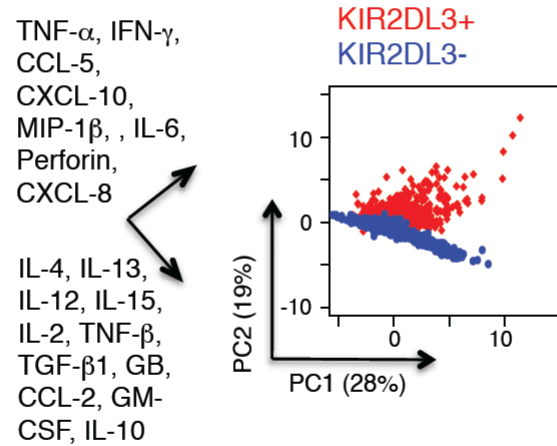
KIR	HLA	Level of Response
2DL3	Cw*07 (C1)	++++
3DL1 ^{high}	Bw4 ^{strong}	++++
2DL3	Cw*12	+++
2DL3	C1 + B*46	+++
2DL1 non*004	Cw2*02,4,5,6,15 (C2)	++
3DL1*007	Bw4 ^{strong}	++
NKG2A	HLA-E	++
2DL1*004	Cw2*02,4,5,6,15 (C2)	+
2DL3	Cw*01,3,8 (C1), 1404	+
3DL1 ^{high}	B*27	+
3DL1 ^{high}	A*24	+
2DL1	Cw*01,3,8, (C1), 1404	-
2DL3	Cw*1402	-
2DL3	Cw2*02,4,5,6,15 (C2)	-
3DL1 ^{high}	B*13	-
3DL1 ^{high}	B*37	-
3DS1	Bw4 ^{strong}	-
3DL2	A*3,11	-

References:

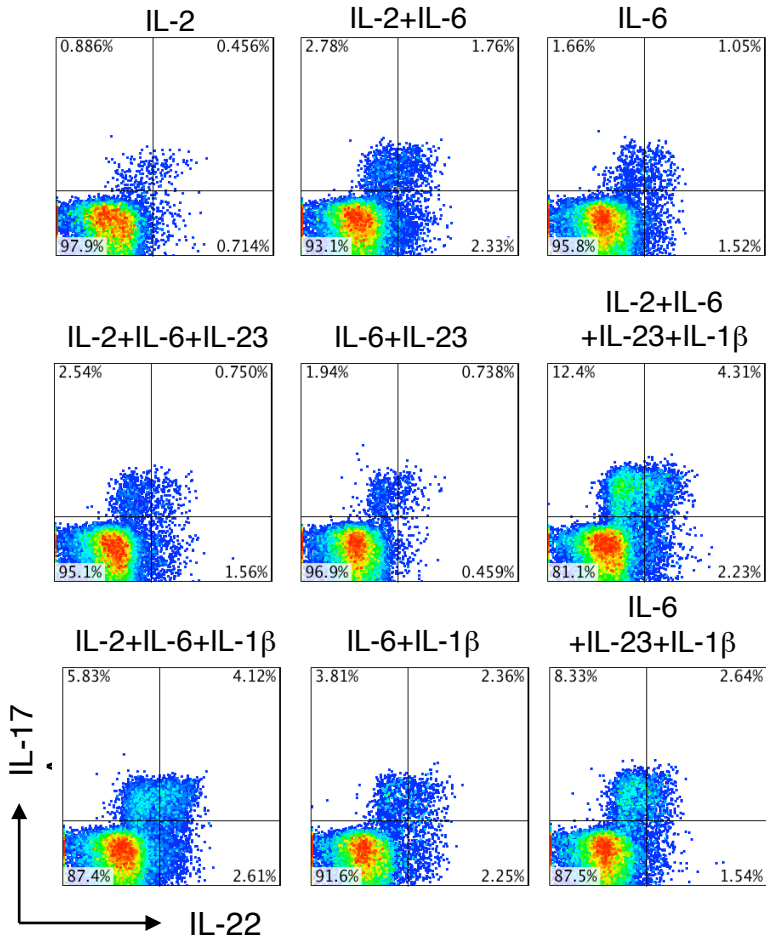
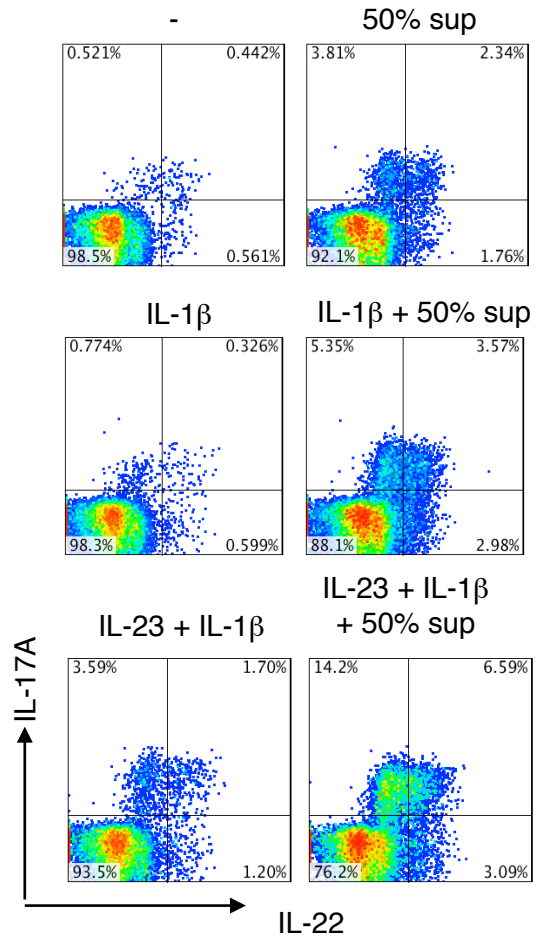
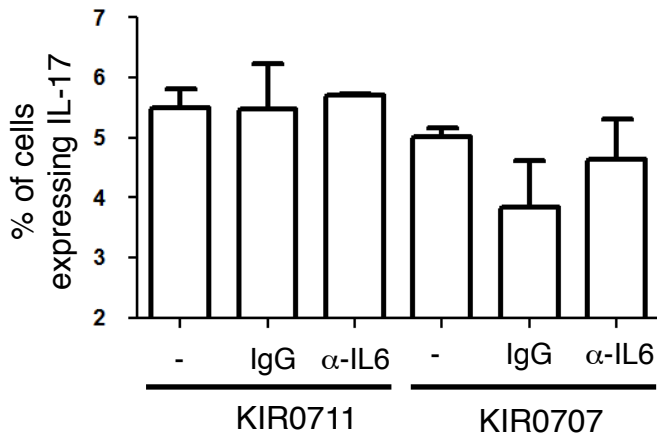
1. Lotze MT, Thomson AW. Natural Killer Cells -Basic Science and Clinical Application. Elsevier, Amsterdam 2009:704.
2. Yawata M, Yawata N, Draghi M, et al. MHC class I-specific inhibitory receptors and their ligands structure diverse human NK-cell repertoires toward a balance of missing self-response. Blood 2008;112:2369-80.



Supplementary Figure 1. Univariate comparison of NK cell secretions from *HLA-C1C1* and *HLA-C2+* CD patient using SCBC. MIP-1 β , GM-CSF, IFN- γ , IL-2, IL-6, CXCL-10, and reference signals from 1-4 cell SCBC microchambers from *HLA-C1C1* (#0919, #1130, red) and *HLA-C2+* (#0125, #811, blue) CD patients.



Supplementary Figure 2. KIR2DL3⁺ NK cells from an AA haplotype individual display higher effector protein production capacity than KIR2DL3⁻ NK cells. PCA analysis of NK secretion profiles from KIR2DL3⁺ and KIR2DL3⁻ NK subsets. Percentage of variation explained by each component is shown in parentheses. The factors for each component are indicated left of the plot.

A**B****C**

Supplementary Figure 3. NK cell supernatant from *HLA-C1C1* healthy donor facilitated *in vitro* T_H17 differentiation. (A) *in vitro* T_H17 differentiation in various cytokine combinations. Scatter plot of IL-17A and IFN- γ intracellular production from CD4⁺ T cells at D14 after differentiation with or without IL-2 at 2 ng mL⁻¹, in the presence or absence of IL-1 β , IL-23, or IL-6, at 50 ng mL⁻¹, as

indicated. (B) Scatter plot of IL-17A and IL-22 intracellular production from CD4⁺ T cells at D14 after differentiation with IL-1 β or IL-23 and IL-1 β , at concentration of 50 ng mL⁻¹, with or without the addition of NK cell supernatant. Numbers in each quadrant represents the percentage of cell in that section. (C) Effect of IL-6 depletion (5ug/mL) from 2 *HLA-C1C1* healthy donor NK cell supernatants in T_H17 differentiation *in vitro*.