

**Figure S1** (A) The gating strategy of NK cells,  $CD4^{+}T$  cells and  $CD8^{+}T$  cells. (B) Flow cytometry shows the proportion of NK cells to  $CD45^{+}$  lymphocytes in healthy controls and liver transplantation.



**Figure S2** (A,B) Proportion of CD56 dim and CD56 bright NK cells by flow cytometry. PBMCs of healthy volunteers were exposed to single immunosuppressants (EVE, 5 ng/mL; SIR, 5 ng/mL; TAC, 5 ng/mL; CSA, 125 ng/ml; MMF, 15 µg/mL; CS, 0.5 µg/mL) for 3 days, the control group (CTL) did not contain immunosuppressive drugs but other culture conditions were the same. (C) Flow cytometry shows the proportion of NK cells in CD45<sup>+</sup> cells after exposure to immunosuppressants. (D,E) Proportion of CD56 dim and CD56 bright NK cells by flow cytometry after exposure to combined immunosuppressants (Group 1: TAC, 5 ng/mL + MMF, 15 µg/mL + CS, 0.5 µg/mL; Group 2: TAC, 5 ng/mL + SIR, 5 ng/mL + CS, 0.5 µg/mL; Group 3: TAC, 5 ng/mL + EVE, 5 ng/mL + CS, 0.5 µg/mL) for 3 days, the control group (CTL) did not contain immunosuppressive drugs but other culture conditions were the same. n=7 for each group. All data were analysed by the mean ± SEM and *t*-test. \*P<0.05, NS, not significant.



**Figure S3** (A,B) Number and proportion of CD4<sup>+</sup> T cells by flow cytometry after exposure to single immunosuppressants (EVE, 5 ng/mL; SIR, 5 ng/mL; TAC, 5 ng/mL; CSA, 125 ng/mL; MMF, 15 µg/mL; CS, 0.5 µg/mL) and combined immunosuppressants (Group 1: TAC, 5 ng/mL + MMF, 15 µg/mL + CS, 0.5 µg/mL; Group 2: TAC, 5 ng/mL + SIR, 5 ng/mL + CS, 0.5 µg/mL) for 3 days, the control group (CTL) did not contain immunosuppressive drugs but other culture conditions were the same. (C,D) Number and proportion of CD8<sup>+</sup> T cells by flow cytometry after exposure to immunosuppressants. n=4 for each group.



**Figure S4** (A) Proportion of CD107a in NK cells by flow cytometry after exposure to single immunosuppressants (EVE, 5 ng/mL; SIR, 5 ng/mL; TAC, 5ng/mL; CSA, 125 ng/mL; MMF, 15 µg/mL; CS, 0.5 µg/mL) for 3 days, the control group (CTL) did not contain immunosuppressive drugs but other culture conditions were the same. All data were analysed by the mean  $\pm$  SEM and t test. n=6 for each group. (B) Purity of NK cells sorted by magnetic-activated cell sorting (MACS). (C) Flow cytometry shows the gating strategy of cytolytic activity. (D) Proportion of CD107a in NK cells by flow cytometry after exposure to combined immunosuppressants (Group 1: TAC, 5 ng/mL + MMF, 15 µg/mL + CS, 0.5 µg/mL; Group 2: TAC, 5ng/mL +SIR, 5 ng/mL + CS, 0.5 µg/mL; Group 3: TAC, 5 ng/mL + EVE, 5 ng/mL + CS, 0.5 µg/mL) for 3 days, the control group (CTL) did not contain immunosuppressive drugs but other culture conditions were the same. All data were analysed by the mean  $\pm$  SEM and *t* test. n=6 for each group. \*P<0.05, \*\*P<0.01, NS, not significant.