Homotypic NK cell-to-cell communication controls cytokine responsiveness of innate immune NK cells

Tae-Jin Kim[1,*], Miju Kim[2,3,*], Hye Mi Kim[4], Seon Ah Lim[1], Eun-Ok Kim[1], Kwanghee Kim[1], Kwang Hoon Song[3], Jiyoung Kim[1], Vinay Kumar[5], Cassian Yee[6], Junsang Doh[2,3] and Kyung-Mi Lee[1]

[1]Global Research Lab, Department of Biochemistry and Molecular Biology, Korea University College of Medicine, Seoul 136-713, Korea

[2]School of Interdisciplinary Bioscience and Bioengineering (I-Bio), Pohang University of Science and Technology, Pohang, Gyeongbuk 790-784, Korea

[3]Department of Mechanical Engineering, Pohang University of Science and Technology, Pohang, Gyeongbuk 790-784, Korea

[4]Division of Integrative Biosciences and Biotechnology (IBB), Pohang University of Science and Technology, Pohang, Gyeongbuk 790-784, Korea

[5]Department of Pathology, University of Chicago, Chicago, IL 60637, USA

[6]Departments of Melanoma Medical Oncology and Immunology, MD Anderson Cancer Center Houston, TX 77054, USA

[*]These authors contributed equally to this work

Supplementary Information

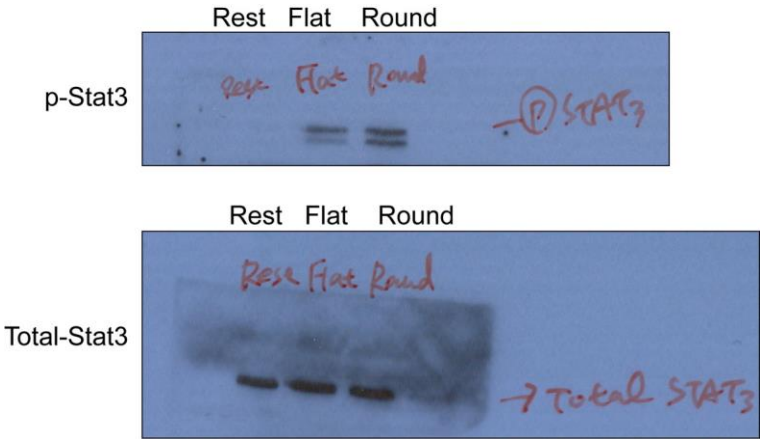

Figure S1. Raw blot data of western blot data shown in Fig. 5b.

Western blot analysis of NK cells cultured in round- versus flat-bottom wells using phospho-STAT3 and total-STAT3. After transfer of whole lysate proteins into the PVDF membrane, membrane was cut into 2 pieces at 55kDa; top piece was incubated with anti-mouse phospho-STAT3 (Tyr 705; 79/86 kDa) or anti-STAT3 (92 kDa, Cell Signaling Technology, Danvers, MA, USA) and the bottom piece was incubated with ERK1/2 (42/44 kDa). After incubation with HRP (Jackson ImmunoResearch Laboratories, West Grove, PA, USA), immunoreactive proteins were visualized using SuperSignal West Pico chemiluminescent substrate.