

Supplemental Materials for

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UM171 expands distinct types of myeloid and NK progenitors from human pluripotent stem cells

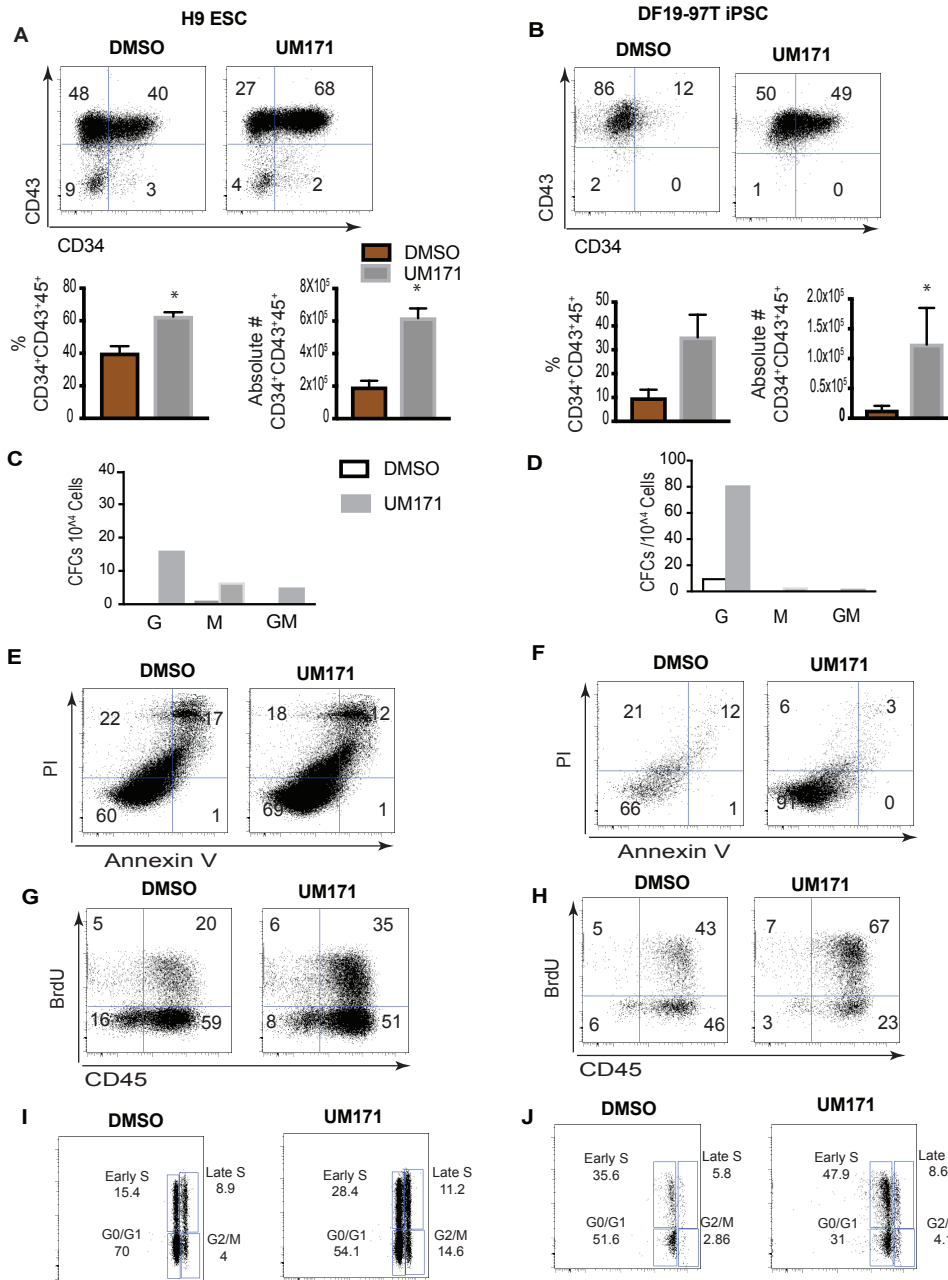


Figure S1. UM171 effect on expansion of CD34⁺CD43⁺ HPs derived from H9 hESCs and DF19-9-7T fibroblast-derived iPSCs. (A)-(B) Representative dot plots showing CD34 and CD43 expression following 5 days of expansion hPSC-derived HPs with UM171 or DMSO (control). Bar graphs showing UM171 effect on % and absolute numbers of CD34⁺CD43⁺CD45⁺ HPs. Results are mean±SEM for 3 independent experiments. *p<0.05. (C)-(D) Graphs showing CFC potential of expanded cells. (E)-(F) Representative dot plots showing apoptosis evaluation using annexin V staining, in cultures of hPSC-derived HPs expanded for 5 days. Dot plots show CD34⁺CD43⁺ gated cells. (G)-(H) Representative dot plots showing assessment of proliferative potential of CD34⁺CD45⁺ HPs expanded for 5 days with UM171 or DMSO, using (G-H) BrdU assay and (I,J) cell cycle analysis. (A), (C), (E), (G), (I) showing H9 hESCs and (B), (D), (F), (H), (J) showing DF19-9-7T iPSCs.

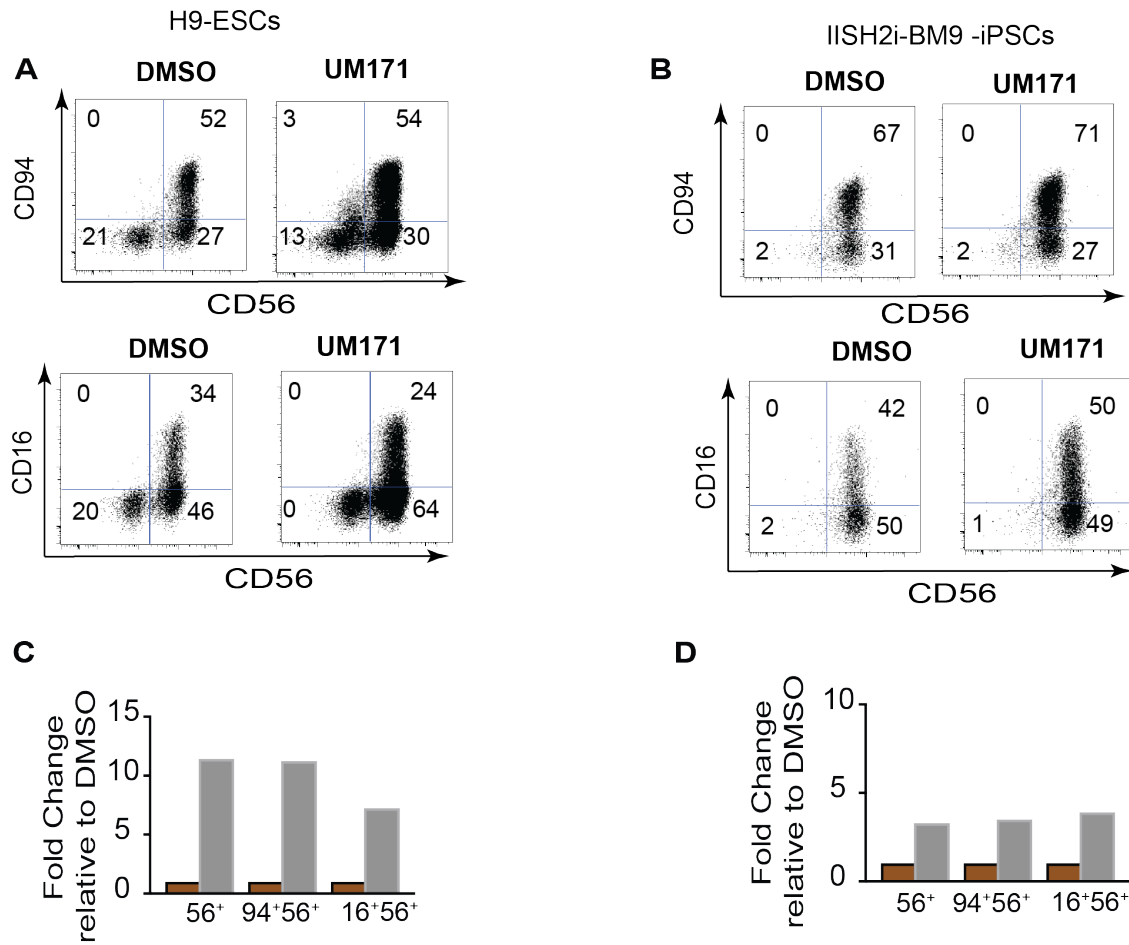


Figure S2. Effect of UM171 on NK cell production from CD34⁺CD43⁺ HPs derived from H9 hESC and IISH2i-BM9 derived from bone marrow iPSCs. (A)-(B) Representative flow cytometry dot plots displaying NK cell differentiation. (C)-(D) Bar graphs showing fold changes in absolute numbers of NK cell subsets. Representative experiment is shown.