Dear Editor,

Please find enclosed our manuscript entitled “A Combinatorial Single-Cell Approach to Characterize the Molecular and Immunophenotypic Heterogeneity of Human Stem and Progenitor Populations” that we would like to be considered for publication in Journal of Visualized Experiments. This paper highlights a protocol for delineating molecular and immunophenotypic heterogeneity within cell populations by combining molecular analysis with single-cell qPCR and immunophenotypic analysis using FACS index sorting. We consider of value publishing these data in Journal of Visualized Experiments, as they provide a complete protocol for reliable single-cell molecular analysis from sorting to final analysis. The techniques presented in this paper and demonstrated in video format will be highly useful for researchers working in the field of hematopoiesis and leukemia.

Mikael Sommarin and Göran Karlsson designed the procedures described in the manuscript. Mikael Sommarin and Rebecca Warfvinge performed the experiments and analyzed the data. Finally, Mikael Sommarin, Rebecca Warfvinge, Fatemeh Safi and Göran Karlsson wrote the manuscript.

During the preparation and submission of this manuscript, we have been kindly assisted by

Rachel Service, Ph.D.

Thank you for your consideration of this manuscript. We look forward to hearing from you.

Sincerely yours,

Göran Karlsson