**Abstract 1513**

**INTRASEQ™: A MULTIMODAL SINGLE CELL TECHNOLOGY FOR SIMULTANEOUS MEASUREMENT OF RNA AND PROTEINS IN SINGLE CELLS TO UNCOVER NEW SINGLE CELL BIOLOGY**

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**Background** Single cell RNA sequencing (scRNA-seq) is a powerful technique for studying the molecular heterogeneity of cells. However, scRNA-seq does not provide information about protein expression, which is essential for understanding the functional state of cells. InTraSeq uses validated and functionally tested antibodies to quantify extracellular, cytoplasmic, and nuclear proteins, as well as their post-translational modifications. The InTraSeq protocol is streamlined and requires only one hour of benchwork. It also allows for multi-day sample storage, making it a practical and efficient tool for high-throughput applications.

**Results** InTraSeq has been used to characterize a variety of cell types, including immune cells, stem cells, and cancer cells. In these studies, InTraSeq has been shown to provide a more comprehensive view of the cellular mechanisms of complex biology than scRNA-seq alone. For example, InTraSeq has been used to identify new cell subtypes, to map signaling pathways, and to track cell differentiation trajectories.

**Conclusions** InTraSeq is a powerful new tool for studying the molecular heterogeneity of cells. It provides a more comprehensive view of the cellular mechanisms of complex biology than scRNA-seq alone. InTraSeq is a practical and efficient tool for high-throughput applications, and it has the potential to revolutionize our understanding of cell biology.

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**REFERENCES**


Abstract 1513 Figure 3  InTraSeq quantifies and shows a robust signal of RNA and proteins in individual cells

Abstract 1513 Figure 4  InTraSeq reveals unbiased PTMs expression correlation with RNA+protein in single cell technologies

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