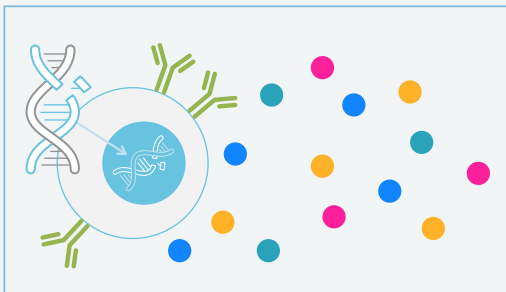


Bruker's Single-Cell Functional Proteomics for Cell Therapy

The Role of Single-Cell Secretomics in Cell Therapies

Cell therapies have made great advancements in fighting cancer, but several challenges remain including overcoming immunosuppressive microenvironments, evaluating product quality, and predicting patient response. Bruker's Single-Cell Secretome for analyzing cell polyfunctionality can help overcome these challenges by revealing unique and predictive functional biomarkers across the research pipeline.

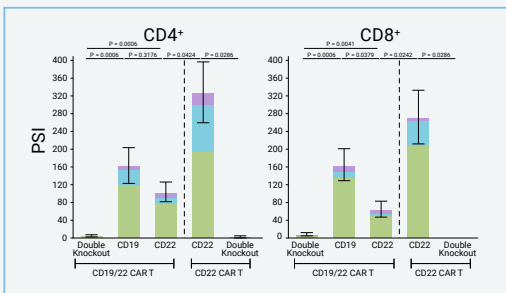
Uncovering Critical Biomarkers Across the Cell Therapy Research Pipeline with Bruker



Preclinical Research

Confirming the Function of Engineered Cells

Predictive functional insights can be used to accelerate preclinical development of cell therapies. When engineering new cell therapies, it is critical that researchers ensure that the edits function as intended with single-cell functional proteomics.

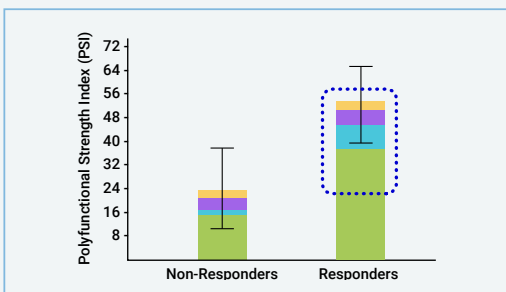


Adapted from Spiegel JY et al. CAR T cells with dual targeting of CD19 and CD22 in adult patients with recurrent or refractory B cell malignancies: a phase 1 trial. *Nature Medicine*. 2021.

Bioprocessing

Optimizing Cell Therapy Manufacturing

The identification of quality indicators of potency in the manufacturing and bioprocessing process is critical. The ability of Bruker's single-cell proteomics to analyze single-cell function and reveal product quality can guide the optimization of cell therapy manufacturing.



Clinical Research

Predicting Patient Response and Relapse

Predictive biomarkers that allow researchers to stratify patient response to cell therapies are needed. Bruker technology can provide detailed insights into functional biological mechanisms that can be used to predict clinical outcomes.

Solving your Cell Therapy Challenges by Unlocking the Functional Proteome

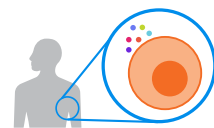
Enable Critical Discoveries One Application at a Time – All in One System.



Single-Cell Secretome

Cytokines, Chemokines, Growth Factors

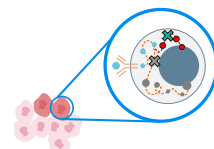
Detect rare subsets of highly polyfunctional cells and access unique biomarkers to better predict clinical outcomes.



Single-Cell Signaling

Kinases, Translation & Transcription Factors

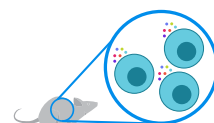
Identify coordinated signaling networks from rare subsets of tumor cells driving treatment resistance by leveraging uniquely highly multiplexed phosphoprotein readouts per single cell.



Effortlessly Automated Bulk Immunoassays

Bulk Proteomics with a Streamlined Workflow

Unlock multiplexed bulk proteomics with low sample volumes and minimal hands-on-time for ultimate ease-of-use.



Your Entire Proteomics Workflow Automated in One System

Discover the Right Instrument for Your Lab's Throughput and Immune Profiling Needs

Unlock Insights into:

- Cancer Immunology
- Cell Therapy
- Inflammation
- Infectious Disease
- Oncology

isolight

A high-capacity instrument enabling higher throughput



isospark

A personalized proteomics system for any lab



isospark duo

An advanced setup for complete functional immune landscaping



Featured Application	High-Capacity Instrument	Personal Lab Instrument	Complete Immune Landscaping
Walk-Away Proteomics Workflow	●	●	●
Immediate Predictive Insights	●	●	●
Publication-Ready Visualizations	●	●	●
Compatible with All Applications	●	●	●
Run Multiple Applications at Once			●
Chips Throughput	8 Chips	4 Chips	8 Chips
Instrument Footprint	28.5 in	18 in	36 in

Learn more at brukercellularanalysis.com

