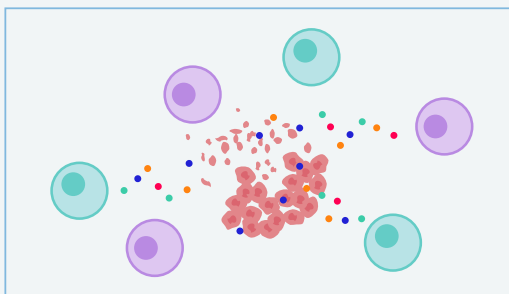


Accelerate Cancer Immunology Research with Functional Proteomics

Immune Cell Function in Cancer

Understanding complex immune-cancer interactions is critical for advancing immunotherapies. Highly polyfunctional immune cells orchestrate the response against cancer, but status quo techniques are unable to directly assess the range of functional proteins in each cell, missing critical attributes. Bruker's single-cell functional proteomic solution detects the presence of these cells, informing more effective cancer treatment.

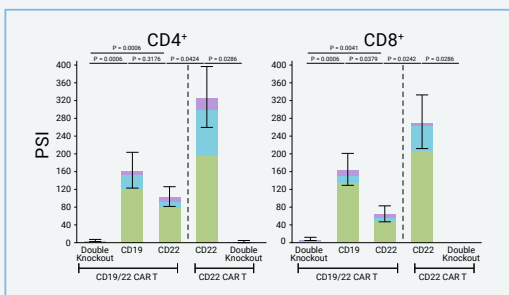
Uncovering Critical Biomarkers Across Cancer Immunology with Bruker



Basic Research

Functionally Define the Tumor Microenvironment

Uncovering immunosuppressive mechanisms of the tumor microenvironment is key to identifying new therapeutic targets. Analyzing function of individual immune cells can uncover unique insights into the immune-cancer interplay.

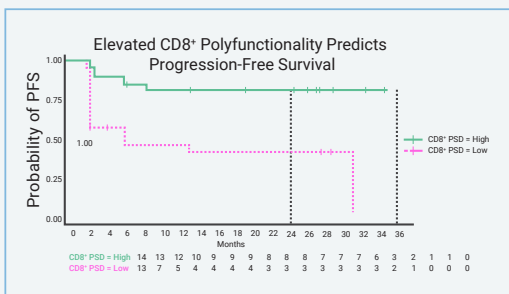


Adapted from Spiegel JY et al. CAR T cells with dual targeting of CD19 and CD22 in adult patients with recurrent or refractory B cell malignancies: a phase 1 trial. *Nature Medicine*. 2021.

Translational Research

Optimizing Cell Therapy Manufacturing

Analyzing single-cell function to reveal product quality is crucial to optimize cell therapy manufacturing. Single-cell polyfunctionality can be used as a product QC metric to guide engineering of cell therapies in preparation for the clinic.



Adapted from Diab et al. Beppegaldesleukin Plus Nivolumab in First-Line Metastatic Melanoma. *Journal of Clinical Oncology*. 2021.

Clinical Research

Predict Patient Response to Immunotherapies

Predictive insights that allow researchers to stratify patient response to immunotherapies are needed for clinical trials. Bruker technology can provide unique functional biomarkers that have shown to be correlative to patient response and survival.

Solving your Cancer Immunology Challenges by Unlocking the Functional Proteome

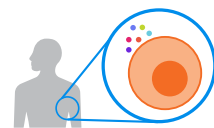
Enable Critical Discoveries One Application at a Time – All in One System.



Single-Cell Secretome

Cytokines, Chemokines, Growth Factors

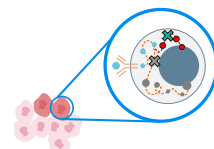
Detect rare subsets of highly polyfunctional cells and access unique biomarkers to better predict patient outcomes to cancer immunotherapies.



Single-Cell Signaling

Kinases, Translation & Transcription Factors

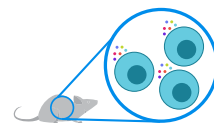
Identify coordinated signaling networks from rare subsets of tumor cells driving treatment resistance by leveraging uniquely highly multiplexed phosphoprotein readouts per single cell.



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 |

