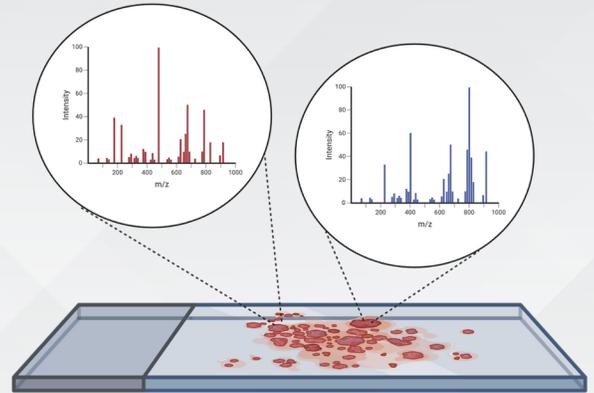


Seven questions to stress-test your spatial proteomics plan

Spatial proteomics is moving fast. Before you commit to a platform, check if your investment can deliver the spatial biology insights you need.



Can the instrument deliver accurate and consistent quantification across high-load and low-load regions?

When working with spatial samples, experiments often begin by examining an entire tissue section. Premium instrumentation supports uncompromised data quality, regardless of sample complexity.

1



What acquisition modes are supported—and how well are they validated for spatial proteomics?

Spatial proteomics increasingly uses DIA or TMT to boost depth from limited input.

3



Can the system detect and localize post-translational modifications within tissue contexts?

Effective spatial proteomics platforms can map critical PTMs like phosphorylation, directly within tissue architecture.

5



Can the platform balance sensitivity and throughput with comprehensive protein coverage?

Leading systems maintain identification of thousands of proteins even with accelerated throughput exceeding 70 samples per day, spatial single-cell sensitivity, or both.

7



Is the instrument compatible with software that supports easy method creation and translation for targeted proteomics assays across diverse pathways or spatially heterogeneous samples?

In spatial proteomics, assay software shapes how quickly and confidently researchers adapt to different biological contexts. Integrated method transfer between runs or instruments is vital for targeting peptides across multiple pathways or spatial regions, avoiding loss of resolution and time spent on reconfiguration.

2



How does the platform minimize chemical noise and isobaric interferences in complex tissue?

Advanced ion filtering technologies and MS3-based fragmentation preserve confidence in low-abundance peptide identifications.

4



What proteome depth and dynamic range can the system achieve at your target spatial resolution?

Advanced spatial proteomics systems can identify and quantify thousands of proteins across many orders of magnitude, capturing signaling molecules and structural proteins.

6

Ready to put your spatial proteomics plan to the test?

Contact your Thermo Fisher Scientific representative for the answers to these questions and more.

Learn more at thermofisher.com/astral