

Taiwan's Syncell partners with Thermo Fisher to advance high-resolution spatial proteomics

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To develop integrated workflow combining Syncell's Microscoop technology and Thermo Fisher's Orbitrap Astral mass spectrometer series



Taiwan-based Syncell, Inc., a pioneer in subcellular spatial proteomics, has announced a strategic co-marketing agreement with Thermo Fisher Scientific to bring a fully integrated, high-resolution spatial proteomics workflow to the market.

The collaboration highlights the power of integrating Syncell's proprietary Microscoop® technology for spatial protein purification with Thermo Fisher's ultra-sensitive Orbitrap™ Astral™ mass spectrometer and newly released Orbitrap™ Astral™ Zoom mass spectrometer.

With this collaboration, Thermo Fisher and Syncell will enable researchers to implement unbiased spatial proteomics with high subcellular resolution to investigate the location and organization of proteins across tissues and cells without relying on predefined targets. This marks a major advance from traditional antibody-based spatial methods and introduces new possibilities for comprehensive protein mapping and discovery across biological systems in oncology, neuroscience, drug discovery, immunology, cell biology, and more.

The combined workflow integrates Syncell's Microscoop Mint — a high-precision system that performs real-time, microscopy-guided spatial protein purification — with the Orbitrap Astral mass spectrometer series, delivering unmatched acquisition speed, proteome depth, and spatial resolution. Together, these technologies unlock a hypothesis-free approach to subcellular proteome analysis in fresh and formalin-fixed, paraffin-embedded (FFPE) tissues as well as in cell culture samples.