

Thermo Fisher, Symphogen to develop new workflows

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Thermo Fisher Scientific announces collaboration to simplify analysis of complex therapeutic proteins.



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Thermo Fisher Scientific, the world leader in serving science, and Symphogen, a clinical-stage antibody oncology-focused company, have entered into a two-year collaborative partnership to deliver validated, platform workflows for simplified characterization and quality monitoring of complex therapeutic proteins.

Building on a decade-long relationship, the new collaboration will develop protein analysis workflows to accelerate drug development for biopharmaceutical innovators, biosimilar manufacturers, contract research organizations, and contract development and manufacturing organizations.

Symphogen will use the Thermo Scientific Q Exactive Plus Orbitrap liquid chromatography-tandem mass spectrometry (LC-MS/MS) system with BioPharma Option to create, test and validate platform workflows for intact and native mass analysis of therapeutic monoclonal antibody (mAb) mixtures. Additional focus will be placed on the development of automated multi-attribute method (MAM) workflows for monitoring critical quality attributes of proteins using high-resolution accurate-mass mass spectrometry in a quality control environment.

"The growing demand for more targeted and personalized treatment modalities results in the development of increasingly complex drug products, requiring research and development of advanced workflows to monitor their structure, manufacturing variation and quality," said John Rontree, senior director pharma & biopharma, chromatography and mass spectrometry, Thermo Fisher Scientific. "The collaboration with Symphogen, in addition to our commitment to the opening of Global Customer Solution Centers, will enable us to jointly leverage our established mass spectrometry technology, along with the expertise of our customers, to develop and implement novel, easy-to-use analytical strategies for complex mAb mixtures needed by drug manufacturers to drive the development of new therapies for cancer patients."

"Through this collaboration, we can leverage the knowledge and world-class technology provided by Thermo Fisher to effectively address our needs," said Dan Bach Kristensen, Ph.D., principal scientist, Symphogen. "The exceptional spectral resolution enabled by the Q Exactive BioPharma mass spectrometry platform means we now have a highly powerful tool for simple, reliable characterization and quality monitoring of complex biopharmaceutical products."

The Q Exactive Plus Orbitrap LC-MS/MS system is the latest addition to the Thermo Fisher portfolio of products used by Symphogen, which includes Thermo Scientific ultra high-performance liquid chromatography (UHPLC) systems and Thermo Scientific Chromeleon Chromatography Data Systems (CDS).