

Wyatt Technology Publishes Whitepaper on Protein Quality Control in High-Throughput Screening Studies

Report details use of DynaPro® Plate Reader II to identify protein aggregation in sample solutions

(SANTA BARBARA, CALIFORNIA – 20 July 2015) Wyatt Technology Corporation, the world leader in instrumentation for absolute macromolecular and nanoparticle characterization, has published a [new whitepaper](#) outlining how to evaluate the solution quality of biotherapeutic candidates prior to screening via Surface Plasmon Resonance (SPR) or Bio Layer Interferometry (BLI). The DynaPro® Plate Reader II. Analyte quality is critical to obtaining accurate and meaningful measurements in order to select the most promising therapeutic candidates, so ensuring the quality of samples is a vital step in the screening process. The DynaPro high-throughput dynamic light scattering (HT-DLS) system provides an effective method of assessing sample materials using a non-invasive, non-perturbative optical technique.

SPR and BLI are popular techniques for high-throughput screening and discovery of biotherapeutic candidates. Impurities such as aggregates and foreign particles often impact measurements through noise, spurious signals, and inaccurate active concentrations. In addition, owing to their size and the small apertures of the on-chip channels, particulates may cause blockage to occur in sensitive SPR microfluidics.

Dr. Daniel Some, Principal Scientist at Wyatt Technology, commented *“Guaranteeing that samples are appropriate for SPR, BLI or ITC analyses is critical to proper binding screens. The rapid and automated quality assessment provided by the DynaPro Plate Reader II HT-DLS system ensures a valuable layer of quality control that would simply not be an option with manual, cuvette-based testing. When single binding experiments are needed, the DynaPro NanoStar microcuvette DLS system evaluates solution quality with as little as one microliter of sample.”*

Requiring no fluidic handling, the DynaPro Plate Reader II HT-DLS system can quickly and effectively analyze protein quality in large sample populations with no concerns for carryover between samples. By automatically classifying samples as high, medium, and low quality, the DynaPro, in conjunction with DYNAMICS® data analysis, collection, and reporting software, provides intuitive visual analysis to quickly evaluate the suitability of each solution for reliable binding screens.

The DynaPro performs measurements in the same microwell plates as SPR and BLI high-throughput discovery screening platforms, saving researchers considerable time and effort in assessing the quality of large batches of biotherapeutic samples and ensuring accurate results. By presenting several example analyses, the [whitepaper](#) showcases the HT-DLS process and DYNAMICS visualizations that make quality control with the DynaPro system practically effortless.

To learn more about Wyatt Technology, please visit www.wyatt.com, e-mail info@wyatt.com or call + 1 805 681 9009.

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About Wyatt

Based in Santa Barbara, California, Wyatt Technology is the world's leading provider of instruments for absolute macromolecular and nanoparticle characterization. With over 40 years' experience developing multi-angle light scattering detectors, working with customers in the biotechnology, chemical, petrochemical, pharmaceutical, academic and government arenas, Wyatt prides itself on its entrepreneurial spirit, and the uniqueness of its offerings. The



Company's groundbreaking technology and uncompromising levels of customer care make Wyatt the global benchmark in its field. For more information, please visit www.wyatt.com.