SARTORIUS

Product Datasheet

Accelerating Cell Line Development Workflows by Automating Data Transfer Between Ambr® 15 Bioreactors and Octet® BLI Platforms



Octet® Bio-Layer Interferometry (BLI) is widely used to monitor various critical quality and process attributes in cell line development (CLD) workflows due to its ease of use and minimal hands-on requirements. From drug product specificity and activity determination through kinetics, affinity and potency measurements to IgG titer determination and protein concentration measurements, the Octet® platform is a multi-application toolbox. Convenient high-throughput ranking of glycosylation levels (GlyM and GlyS) provides added capabilities to gauge glycan levels together with clone productivity. Due to the versatile application range in CLD and fast time to results, Octet® assays are often used to investigate the quality of process samples from Ambr® 15 Advanced Microbioreactor Systems.

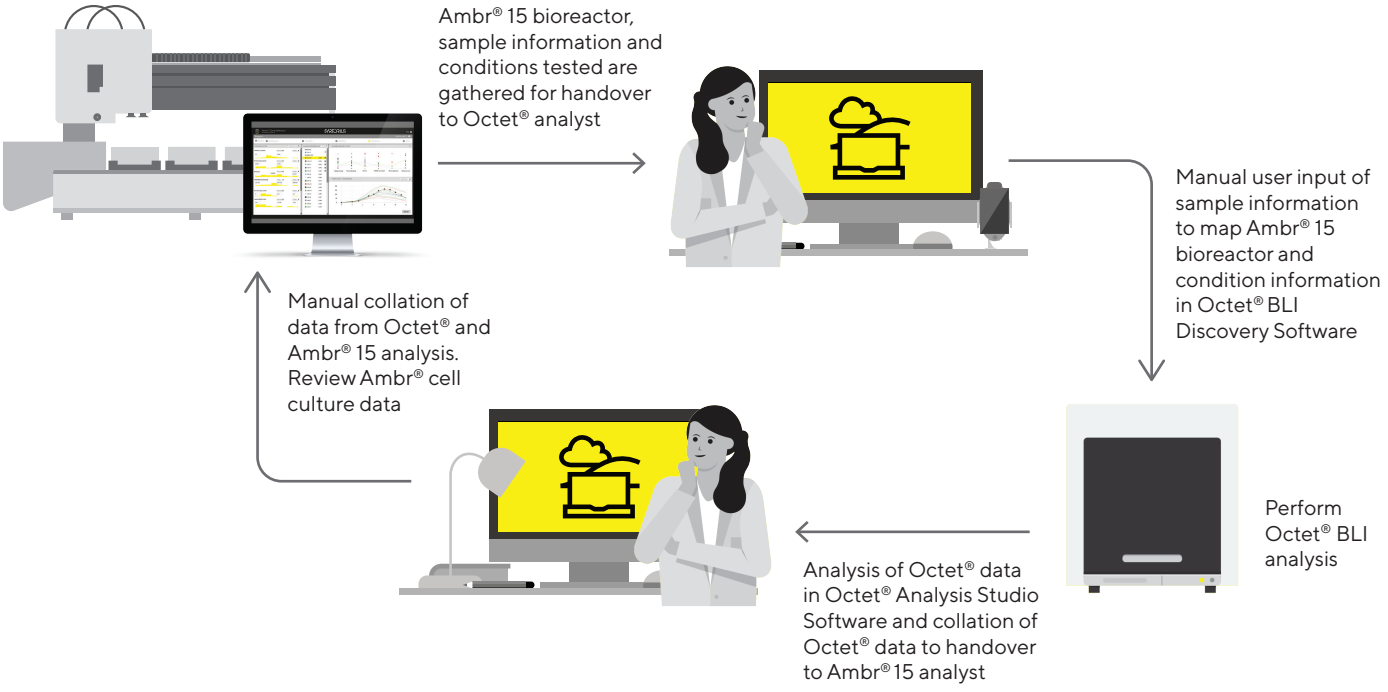
The Sartorius Ambr® 15 system is a high-throughput automated bioreactor system that allows for the selection of optimal media, feeding schedules, and other process parameters leading to the development of optimal cell culture conditions and selection of desired clones. The combination of the Ambr® 15 and the Octet® systems reduces development timelines and enables informed decisions to be made earlier in the cell line development process.[1]

An Ambr® 15 experiment typically requires at least a daily measurement of process attributes in each bioreactor during a multi-day run. This can lead to tens to hundreds of samples that will require analysis over the course of the run. Currently, Octet® and Ambr® 15 workflows require careful manual transfer of Ambr® 15 experimental data to the Octet® Software for analysis and back to the Ambr® 15 Software for information and data integration. Export and import of information and data is time consuming, resource inefficient and can lead to errors being incorporated into data during the transfer process. This risk increases further when hundreds of process conditions are tested, and multiple transfers are required.

Current Ambr® 15 and Octet® Workflows

Figure 1

Current Ambr® 15 and Octet® Workflow Involving Manual Data Transfer.



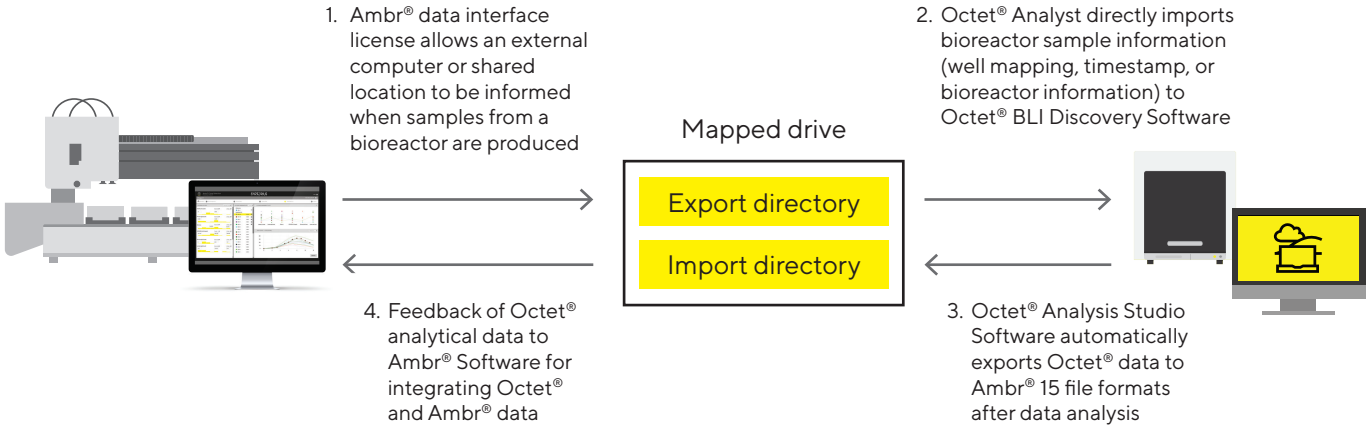
Note. A typical Octet® experiment will require users to track Ambr® process parameters, time stamps for each bioreactor for integrating Octet® data with Ambr® cell culture analytics.

Integrating Ambr® 15 and Octet® BLI Data Workflows with the New Octet®-Ambr® Data Bridge Software

Streamlining user workflows is key when developing solutions for complex processes and analysis, especially when process decisions are made using a combination of data points obtained from different platforms. Octet® Software version 13 now supports data integration with Ambr® 15 platforms. The data bridge is available in the Octet® Software and allows users to easily unify Ambr® 15 process data with Octet® experiments hence eliminating manual data entry and data transfer between the platforms.

Figure 2

Ambr® 15 and Octet® Workflow Utilizing the New Data Interface for Automated Data Exchange Between the Two Platforms.



Prerequisites

Octet® BLI Requirements
- Octet® Version 13 Software

Ambr® 15 Requirements
- Ambr® R10.0 Software or above
- Ambr® 15 Octet Data Interface License

References

1. Cell Line Development: Accelerating Process Optimization by Combining Ambr® 15 Cell Culture with Octet® Titer Measurements, Sartorius Applications Note. Kirby J, Rees-Manley A, Apiyo D, Klein L , Diem E, Dale T, Read Applications Note

Ordering Information

Part No.	Description
50-5029	Upgrade of Octet® instrument software to the latest software version of software. Includes 4 seat licenses. Includes Octet® Software Version 13. Requires previous version of Octet® Software.
50-5098	4-seat licenses of Octet® Software version 13.X. Includes FREE upgrades within V13.X. Requires previous purchase (50-5029) or installation of version 13.X software.
50-5099	1-seat license of Octet® Software version 13.X. Includes FREE upgrades within V13.X. Requires previous purchase (50-5029) or installation of version 13.X software.
50-5100	2-seat license of Octet® Software version 13.X. Includes FREE upgrades within V13.X. Requires previous purchase (50-5029) or installation of version 13.X software.
50-5101	Site license for Octet® Software version 13.X for offline data analysis. Installation and use of the Octet® Software version 13.X at a physical site (single city or ZIP code) as defined in the purchase order. Includes FREE upgrades within 13.X. Requires previous purchase (50-5029) or installation of version 13.X software.
001-8B39	Ambr® 15 Octet® data interface

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