

BIG KAHUNA

Biologics Formulation



UNCHAINED
LABS

Nail down the right formulation faster

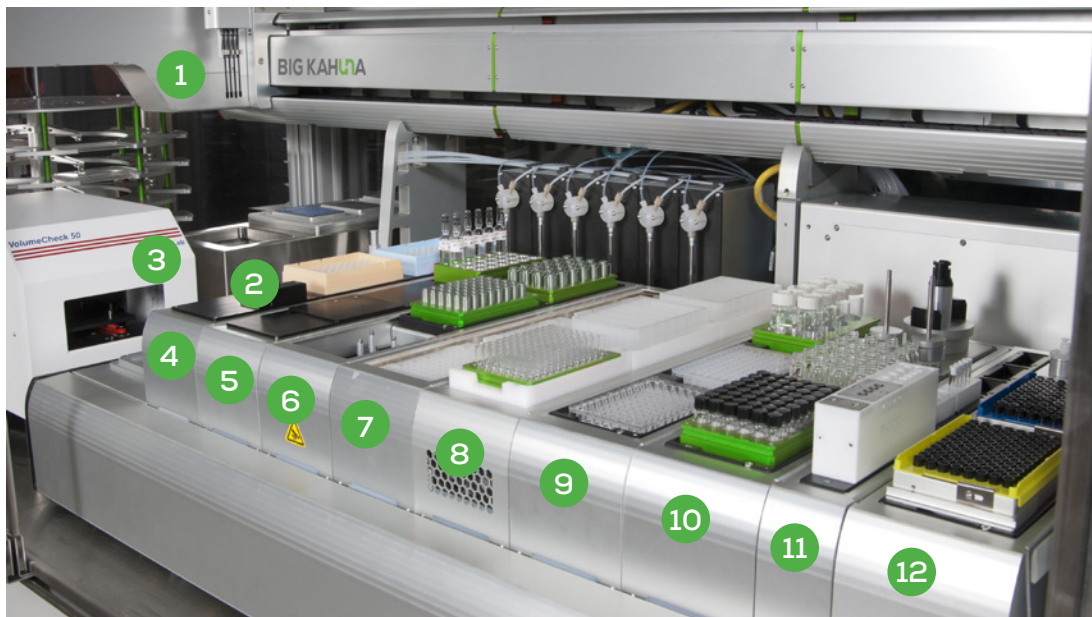
Big Kahuna takes on your entire biologics formulation development process and automates it end to end. It'll tackle buffer prep, buffer exchange, pH checks, sample prep and analytics. Get those accelerated stability studies done with integrated sample incubation and automated freeze/thaw systems. Take on more developability screens, check out a wider formulation space and find the most stable biologic this month – not this year.

- Characterize formulations with limited material
- Developability and preformulation screens
- Robustness and stress studies
- Measure pH, viscosity, turbidity and visible particles
- Manage and track formulations and analytical results



Gear up for anything

Prepare, stress and analyze hundreds of formulations in parallel in a couple of days – hands off. Big Kahuna also corrals your formulation info into a single location for easy reporting and analysis. Do it all using a single, configurable platform and crank through more candidates and formulations than ever.



- | | |
|--------------------------------------|---------------------------|
| 1 4-Tip pH probe | 7 Vortexing station |
| 2 Buffer exchange module | 8 Cooled storage bay |
| 3 Volume check | 9 3-Position passive rack |
| 4 Viscosity station | 10 Tip/rack holder |
| 5 Visual inspection station | 11 Wash station |
| 6 Vial capping and decapping station | 12 Tip/rack holder |

Ditch dialysis

Big Kahuna lets you skip the dialysis cassettes, desalting columns and trips to the centrifuge that come with manual processes. It automates buffer exchange using our proprietary Unfilter consumable with a combo of pressure-based ultrafiltration and gentle mixing. While it's churning out protein formulations on up to 96 samples, use the time you get back to attack the other big things on your to-do list.



Big Kahuna with buffer exchange module (left)

Stress out your proteins

Put your proteins through their paces. Agitate, freeze/thaw or crank up the heat and see how they deal. Shake, spin and visually inspect right on the deck to see if they aggregate. Ramp temps up or down to check out what they do in various climates. Take it up a notch with incubators and a scheduler to automate accelerated and long-term stability studies.



Vortexing station



Heating/cooling/stirring station

Slam through analytical measurements

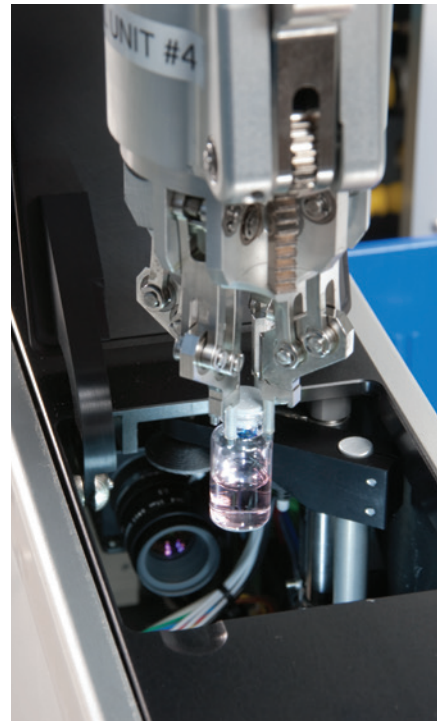
Big Kahuna lets you add the tools you need to find out which formulations make the cut. On-deck analytics check pH, measure viscosity, assess turbidity and count large visual particles. Up your arsenal with on-deck 3rd-party analytics like UV/Vis and DLS, or automate your sample prep for off-deck HPLC and CE analysis.



Multi-channel pH probe



Viscosity station



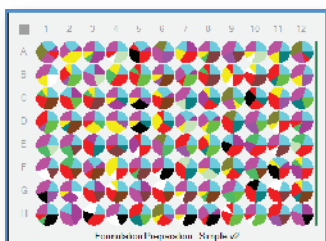
Visual inspection station

Break through bottlenecks

LEA doesn't move the bottleneck, it totally unclogs it. You get intuitive experimental design that makes sense on the front end and full integration with analytical tools on the back end. LEA also links your conditions, steps and analytical data together so your final report doesn't just have numbers, it's got all the information you need to make real decisions.

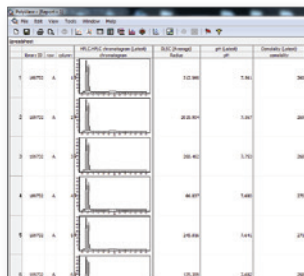
Library Studio

Design complex, high-throughput experiments in an array-based format



PolyView

Review and report all info from experimental design, execution and analytics



Automation Studio

Execute designed experiments and integrated analytics



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