

BIG KAHUNA

Small Molecule Preformulation



UNCHAINED
LABS

Kick your preformulation screening into high gear

Big Kahuna systems give you automated, high-throughput, end-to-end solutions to characterize every last physicochemical property of your drug candidates. They're completely configurable and built to take on the hard stuff. Churn through more structures and conditions earlier, find out what's worth formulating sooner and get to the best druggable form of your API pronto.

- Solubility screening
- Crystallization and polymorph screening
- Powder dispensing
- Reaction screening and optimization



Supercharge your workflow

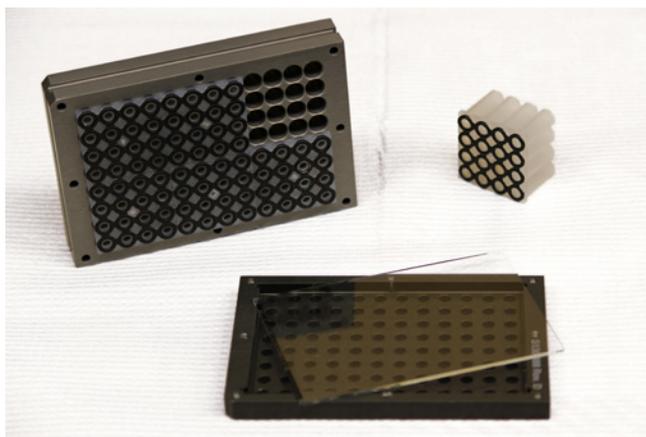
Big Kahuna lets you run hundreds of experiments in parallel with way less material, so deep exploration of your preformulation space is totally doable. Pick your variables, map out your workflow and get it all done on one system. See the big picture more clearly, discover clues and spot more advantageous variables and conditions.



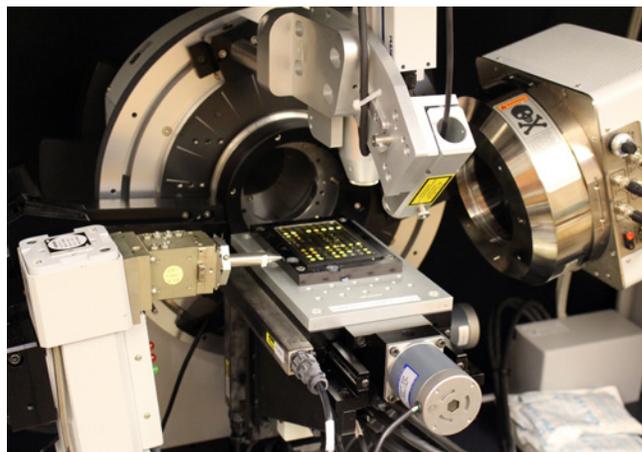
- | | |
|----------------------------------|---------------------------------|
| 1 Vial/plate gripper | 6 3-Position heating/stirring |
| 2 Balance with visual inspection | 7 3-Position heating/stirring |
| 3 Powder dispense hopper rack | 8 Heated filter block |
| 4 Passive rack | 9 Heated 4-tip liquid dispenser |
| 5 Tip rack | |

Get your crystals on

Give the number of crystalline forms you can characterize on your API a big-time boost with the Big Kahuna 8 x 12 array crystallization assembly. Heat or cool samples right on the deck. The universal substrate lets you analyze samples by birefringence, XRD and Raman spectroscopy without wrecking a single crystal.



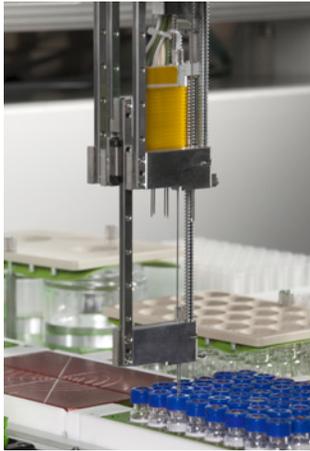
Crystallization assembly with universal substrate plate



Integrated structural characterization by XRD

Stay soluble

Temperature-controlled pipetting and filtering help get your APIs into solution. Keep them from precipitating when you add or remove reagents by using a heated dispense element with septum-piercing tips. A heated filter block with 96 isolated sample wells erases any chance of well-to-well cross contamination, so you can get the conditions just right.



Heated dispense element with septum-piercing tips



Heated filter block on temperature controlled station

Go sticky or solid

Spot-on pipetting, dispensing and weighing of viscous and solid materials means you're accurately evaluating your formulated drugs. Big Kahuna uses positive displacement pipetting to handle the stickiest stuff out there – even at low volumes. Solid dispensers use an adaptive learning algorithm to accurately dispense and weigh powders. They also remember optimal settings so you get fast, reproducible dosing every time.



Viscous liquid
dispenser handles
up to 1000 cP



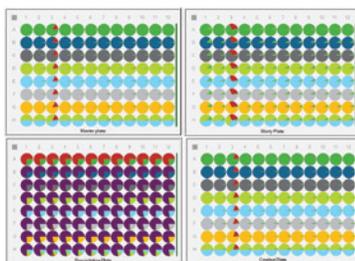
Classic hoppers use
active stirring
for uniform flow rate



SV dispensers
use vibration for
precise delivery

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.

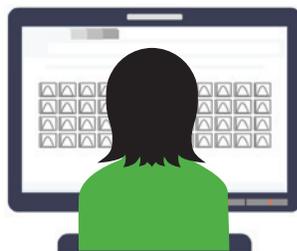
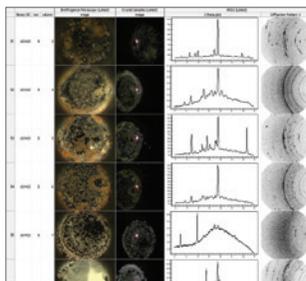


Library Studio

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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