mosquito® LCP

protein crystallization without compromise

mosquito LCP is our flagship liquid handler for protein crystallization screening. With structural biology becoming more multi-disciplinary, labs need a robust solution that's easy-to-use by all. Delivering the same repeatable and reliable performance with our proven true positive displacement technology, mosquito LCP delivers high performance membrane and soluble protein crystallization for all.

- **Guided experimental workflows:** new Touch Screen software allows quick and easy set up of complex crystallizations from LCP to everyday soluble protein screening. Easily edit and recall commonly used experiments
- **2 or 4 position deck:** rapid automated plate set up for all methods of standard crystallization techniques: sitting drop, hanging drop, microbatch, bicelles, microseeding, additive screening and lipidic cubic phase
- **Reproducibility:** unrivalled across a wide range of viscosities, down to 10 nL on multi-aspirate
- **Exact drop precision:** perfectly positioned drops for easier downstream imaging
- **Precise Humidity Control:** ensures the intergrity of dispensed drops whilst also improving repeatability
- **Robust day-to-day performance:** proven reliability with no blocking or clogging, rapid recovery even in heavy use
- **Well supported:** all backed up by an experienced network of support and applications specialists ready to help

sptlabtech

accessories for mosquito® LCP

precise humidity chamber

Controlling sample evaporation is critical when dispensing very low volumes of LCP in boli given the phases sensitivity to water content. Failure to do so can result in drops drying out or inconsistent drop volumes, especially when environmental conditions and local humidity vary.

mosquito's precise humidity chamber (PHC) reduces experimental inconsistencies caused by variation in the humidity in the environment, by allowing users to control the relative humidity (RH) of each experiment. The humidity chamber enables up to a 90% reduction in drop evaporation.

- The chamber takes less than 2 minutes to reach high levels of relative humidity (80-90% RH)
- Full feedback tight humidity control during experiment with set point accuracy of +/- 5% RH

automated LCP mixer

Mixing LCP manually can sometimes be repetitive. Our benchtop LCP mixer allows the automated mixing of LCP sample in two coupled syringes (100µL and/or 50µL) in a compact simple to use unit allowing on the fly adjustment of mix cycles whilst not tying up the instrument when in use.

FAQs

How long does it take to set up plates?
2 mins/ 96-drop plate for vapour diffusion
5 mins/ 96-drop LCP plate

How do you ensure the LCP needle height is correct every time?
The precise needle height is automatically calibrated during the experimental set up.

Can I dispense just a few columns if I don't have much sample?
Yes – as mosquito uses an 8 channel head you have the flexibility to scale your experiment column by column.

get in touch

SPT Labtech Ltd.
Melbourn Science Park, Melbourn
Hertfordshire SG8 6HB, United Kingdom

Tel: +44 (0)1223 627 555
Email: discover@sptlabtech.com

sptlabtech