Quick Start – LCP Screening

- 1. Prepare the Lipidic Cubic Phase (LCP) see other side of this card.
- 2. Prepare the screen or optimization conditions. Typically pipette 96 crystallization conditions to a source plate. (Use enough to cover the bottom of the well).
- 3. Open WaspRun and select LCP dispensing > LCP plus additives.
- Specify: Experiment type (a), Source plate (b), Destination plate (c), LCP dispense type / bolus shape (d), number of additives (e), viscosity settings (f), drop volumes (g), where to dispense to (h).

	File Edit View Dispense About
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	Browse Basic Wells Advanced Instructions
Waspfun - LCP Single Protein Ele Edit Yiew Dispense About Source Basic Wels Advanced Instructions Dispenses up to five drops of LCP with screening solution and up to two constant additives dispensed on top. LCP screen (servic) and additive solution volumes may be set independently for each dop within a well. See Instructions tab for detailed instructions.	Displet One Displet One Protein Volume [µi] 0.100 Screen Volume [µi] 1.00 Displet One Calculated Volume [µi]
ttApplei T.c. DywA ano, DywA, DywS, DywS Destination Plate Solution Settings: Experiment Type LCP on Glass (a) Number of Additives (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Pisteloader
LCP Target Plate LCP_Marien/eld C) Protein Name Protein Plate Barcode C) Screen Name Screen	Close Zoom
Wells to be dispensed 96 Total LCP Required [µI] 9.6480	Ziose Zoom
Dispensed doop per well 1 Number of plates to do 1 Exits paletes option Use Evaporation Shield LCP Dispense Method Disk Dispense (d) Source Plate LCP Source Plate LCP Source Plate (b)	LCP_Mainted Particular Particular </th

- 5. Click the dispense button to begin the experiment.
- 6. FrontPanel.exe will now open. The software will display step by step instructions to prepare the robot for the experiment:
- 7. Place the LCP sandwich plate and sandwich plate holder or the vapour diffusion plate onto the plateloader. **If you are dispensing to an LCP sandwich plate place the source plate containing the crystallization solutions on the plateloader as instructed. Fill the LCP sandwich plate holder reservoir with water to prevent evaporation during experiment.
- 8. Follow instructions to attach the LCP syringe to the robot. Inform the robot how much LCP is in the syringe the robot will now prime the LCP syringe ready for dispensing. After the syringe has primed, tighten the finger screw to hold the nose of the LCP syringe to the arm.
- 9. Follow the instructions to check the alignment of the LCP syringe and Microtip to a target well. Adjust both the LCP syringe and the Microtip so that they are just touching the target well.
- 10. Follow the on screen instructions to:
 - a. Attach the evaporation shield.
 - b. Debubble and flush the Microtip.
 - c. Load additives for the experiment if specified.

The experiment will then begin. After the experiment has completed, carefully seal the plate.