

Descriptions of the three options for screeners to test their cherry picks:

Option 1 Hewlett Packard D300: The screener may use the Hewlett Packard D300 liquid dispenser to retest the 1.5 uL cherry pick volume provided by the screening facility. The instrument uses proprietary HP T8 and D4 cassettes. Each T8+ cassette allows for 8 compounds (up to 10 uL/compound or 20 uL/DMSO) to be dispensed into an assay plate. There are 4 dispense locations on the D4 and each dispense up to 200 uL of DMSO. If you would like to use the D4 for compound dispensing, please contact Jennifer Smith to discuss this possibility.

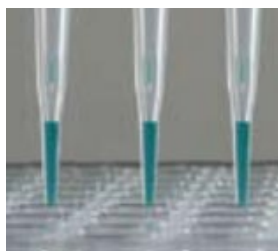


Please note that the D300 can dispense both aqueous and DMSO solutions, however ICCB-L only supports DMSO based dispensing using this unit.

Option 2 PocketTip Transfer: The screener may use essentially the same assay as for their primary screen, using PocketTips to transfer their cherry pick compounds into their assay plates instead of pin transfer. Use of PocketTips requires lab automation and assistance from the ICCB-L staff. PocketTips allow up to 3 transfers of 100 nL from each 1.5 uL sample of cherry picked compound at 5 mg/mL in DMSO, however compound at higher concentrations of DMSO (eg. Natural Product extracts) may get fewer transfers per 1.5 uL.

The ICCB-L PocketTips protocols require that cherry pick compounds (0.6-2 uL volume) are in ABgene AB-1056 or Eppendorf Twin.tec microplates, and that the plates have been spun down in a centrifuge at 1000 rpm for 1 minute immediately prior to use. The destination assay microplate should contain 30 uL of media or assay buffer. A separate PocketTip will be used for each replicate. Please inquire with the screening room staff about the current price of PocketTips. The PocketTip workflow is illustrated below.

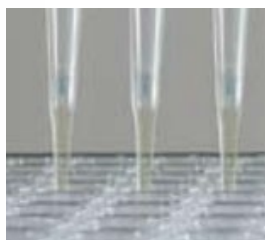
PocketTips® Workflow



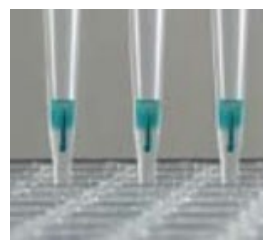
Step 1: Source Plate: Sample aspirated and pocket in tip fills to capacity (50 nl, 100 nl, or 250 nl).



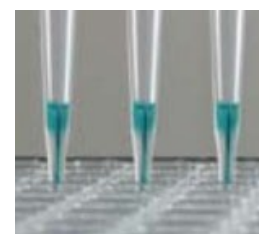
Step 2: Source Plate: Sample dispensed back to cherry pick plate and pocket remains full.



Step 3: Wash Plate: The portion of the tip below the pocket is washed to eliminate carryover.



Step 4: Destination Plate: Sample or liquid in destination (assay) plate is aspirated to pocket level in the tip, and mixed.



Step 5: Destination Plate: Mixed sample is dispensed back to the destination (assay) plate.

Option 3 Test in Own Lab: The screener may take possession of the plate of cherry pick compounds from the screening room staff and use them for follow-up assays as they see fit. Screeners may elect to dilute the cherry pick compounds in DMSO or buffer to “stretch” their cherry pick compounds for more assays. Please be aware of the issues involved with retesting compounds using a higher % of DMSO. If you have any questions about this, please contact a screening room staff member.