# Instructions for Requesting Small Molecule Cherry Picks at ICCB-L

All cherry-pick requests must be submitted to Dave Wrobel (david_wrobel@hms.harvard.edu)

- You must submit the following information to Dave **before** making a request:
  1. An annotated primary screening data template(s). Please see Step 4 of the Data Deposition Guidelines.
  2. A completed Primary Screen Report, which will include a summary of the screening protocol, the controls used during the screen, a description of the analysis method, and the criteria for scoring screening positives.

- You are allowed to request cherry picks for up to 0.3% of the total compounds screened. For example, if you screened 45,000 compounds in duplicate, you can request up to 135 (0.3%) cherry picks. You do not have to wait until all screening is complete to request cherry picks, but you must submit data for all compounds up to that point to make a request. With written scientific justification, additional cherry picks at a volume of 1.5 uL/compound can be requested for a fee (depending on compound availability). If you would like to request more cherry picks than 0.3% of total compounds screened, please contact Jennifer Smith (jennifer_smith@hms.harvard.edu).

- The standard format for cherry pick plates is to have the outer two columns (1, 2, 23, 24) and rows (A, B, O, P) empty. If you would like additional columns or wells to be left empty, please specify this to Dave at the time you request your cherry picks.

- Once your request has been submitted to Dave with all of the above conditions and in the format described below, it will be forwarded to the screening room. The screening room staff will prepare a cherry-pick microplate for you with approximately **1.5 microliter** of each of the requested compounds.

- The screening room will notify the researcher via email when the cherry-pick plate is ready. This will generally be within two weeks of receiving the cherry-pick request from Dave.

  **Note**: Please use your cherry pick samples carefully, and DO NOT use your entire cherry pick sample in a single experiment. The screening group generally does not repeat cherry pick requests, and commercial vendors may not be able to supply you with compound immediately upon request. The screening group will provide extra seals to re-seal your cherry pick plates after use.

  The screening room recommends that the cherry pick plates be kept in a desiccated environment at –20°C and be handled with caution since they are DMSO-dissolved compounds. Also, spin the plate before opening it so that all of the compound is at the bottom of the well.

**Required Format for Cherry Pick Requests**

Screeners must make their own data file in Microsoft Excel in the following format:

Example: cherry pick request file for screen # 101

Screen 101
6 cherry-picks
2,000 total compounds screened

| Plate | Well | Positive | Cherry Pick | Comment, required if positive is not chosen for cherry picking. |
|---|---|---|---|---|
| 1518 | C21 | M | C | |
| 1519 | D19 | M | | Also hit in other screens |
| 1520 | F05 | W | C | |
| 1520 | M22 | S | C | |
| 1521 | A11 | M | C | |
| 1522 | P15 | S | C | |
| 1548 | J22 | M | | Edge effects |
| 1214 | K10 | S | C | |
| 1226 | N18 | W | | Very weak |

Cherry pick request files should include all positives annotated as a W, M, or S. The columns should be **Plate**, **Well**, **Positive**, **Cherry Pick**, and **Comment**. The file must contain the **Screen Number** for which the cherry picks are being requested. The file must also contain the **number of cherry picks** being requested and the **total number of compounds screened** to ensure compliance with the "0.3% Rule". Place a C in the Cherry Pick column for those wells that you decide to cherry pick. Enter a comment for all positives that you decide not to cherry pick.

- The Plate and Well columns are listed in ascending order, first by Plate, then by Well.

**Important Contact Information:**

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