

Compound Library Usage Instructions

Centrifuge

- Compounds in our library collection are delivered in solution (liquid) or powder (solid) in the specified packaging for your custom collection with dry ice. Please inspect that the package is completely intact and did not leak or pour out as soon as you receive your library. Allow the compounds to **warm up (melt) to room temperature before centrifuging**, to insure collection of all the compound in each well.

Pack

- In most cases, we provide the compounds in high concentrations, such as 2 mM or 10 mM for liquids suspended in DMSO or water. Depending on your experiment, you can **aliquot the compounds into smaller volumes**, for example 10 aliquots of 10 μL for 100 μL of the compound. The aliquoted amounts can then be stored at **-80°C for approximately 2 years or at -20°C for approximately 1 year**.

Dilute

- We recommend making **100 μM** intermediate concentration, for your experiments, by diluting the original solution (stock solution) with serum-free medium or sterile water, which can then be stored at **-20°C for up to 3 months**. For example, you can add 99 μL serum-free medium to 1 μL of the stock solution which will yield an intermediate concentration of 100 μM . This can be done by manual or machine operation to your desired volume, which is optional.

Experiment

- For compound screening, for example with a 96-well plate, you can add **10 μL** of the compound(s), of 100 μM intermediate concentration, to a cell culture plate with **90 μL** medium which will yield **a final concentration of the compound(s) to 10 μM in each plate**. If you have a sizable collection of compounds (i.e. >500), you can use High-throughput screening (HTS) or High Content screening (HCS) methods.

The effects of the compounds can be observed for up to 24 hours, and you can test cell activity using CCK-8, detect protein(s) by fluorescent labeling, determine cell cycle by flow cytometry, etc...

Depending on your results, it is highly recommended you use compounds indicating any activity to further investigate by conducting secondary screening, re-screen, verification and exploring mechanisms.

Note:

- Blank control(s) or positive control(s) are necessary.
- Diluted compounds can be stored at **-20°C** for about 3 months. It is always better to prepare new solutions (as needed) at the time of use.

