

# How to Create a Plate Layout in DISCOVERY WORKBENCH® 4.0

## To Create a Plate Layout without a Kit Layout:

- 1) Launch DISCOVERY WORKBENCH.
- 2) Click the New Plate Layout icon (Figure 1).
- 3) In the New Plate Layout window, select the correct Spot Layout and name your plate layout.
- 4) In the Plate Layout Editor window, click the A to assign assays.
- 5) In the Assign Assays window, right click a spot and select Assign Assay. (New assays can be assigned using Create Assay.)
- 6) Locate the desired assay from the Select Assay window. Use the filter box to quickly narrow the assays presented (Figure 3). Select the desired assay and click OK to assign the spot.
- 7) Repeat assay assignments until all spots with assays are defined, click OK.
- 8) Left click to select the wells containing Standards, and click S to assign Standards.
- 9) Within the Assign Standards to Wells window, select the number of replicates and Replicate Right or Down; enter the Starting Concentration and Dilution Factor; select Dilute Down or Dilute Up. If the last standard is zero, correct the value in the table; click OK.
- 10) Assign Controls, if the plate contains control samples, using the same procedure. If you enter a dilution fold number in the Sample Dilution column, the software will calculate dilution-adjusted concentrations.
- 11) Select the wells containing Unknowns, and click U to assign Unknowns.
- 12) Within the Assign Unknown Sample to Wells window, enter number of replicates and direction; enter Sample Dilution factors (if needed); click OK.
- 13) Assign units for the plate by clicking Unit.
- 14) Sample IDs may be typed in for each well in the corresponding Assign window, or may be copied and pasted or imported. This is covered in a separate Quick Reference Guide.
- 15) Save the plate layout (File → Save Plate Layout).
- 16) Close the plate layout (File → Close Plate Layout Editor).

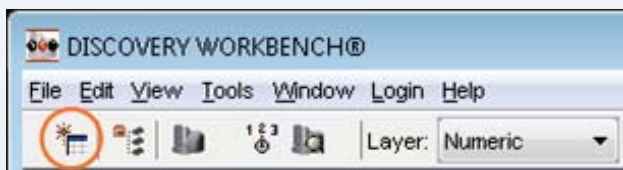


Figure 1: New Plate Layout icon

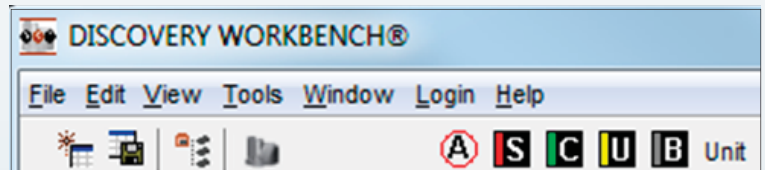


Figure 2. Assign Samples to wells

- |                           |                         |
|---------------------------|-------------------------|
| <b>A</b> Assign Assays    | <b>U</b> Assign Unknown |
| <b>S</b> Assign Standards | <b>B</b> Assign Blank   |
| <b>C</b> Assign Controls  | <b>Unit</b> Assign Unit |

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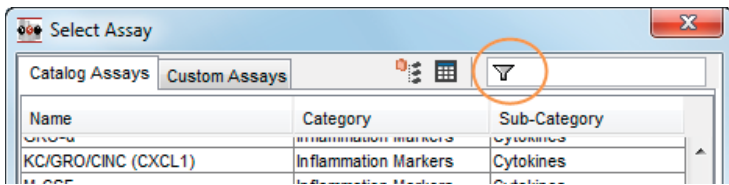


Figure 3. Select Assay window

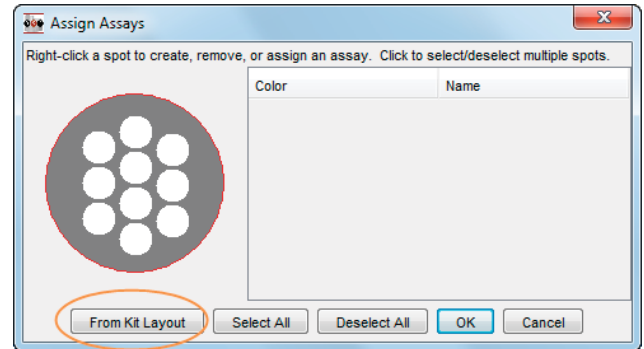


Figure 4. Assign Assays window

## To Create a Plate Layout with a Kit Layout:

1. Start DISCOVERY WORKBENCH software.
2. Click the New Plate Layout icon (Figure 1).
3. In the New Plate Layout window, select the correct Spot Layout and name your plate layout.
4. In the Plate Layout Editor Window, click the A to assign assays.
5. In the Assign Assays window, click the From Kit Layout button (Figure 4). A new window will open; choose the correct kit layout. Only kit layouts of the correct well/spot configuration will be displayed; the list can be filtered or sorted. Kit layouts cannot be modified from this screen.
6. The kit layout will automatically assign all spots. Click OK.
7. Select the wells containing Standards, and click S to assign Standards.
8. Within the Assign Standards to Wells window, select the number of replicates and Replicate Right or Down. Enter the Starting Concentration and Dilution Factor; select Dilute Down or Dilute Up. If the last standard is zero, correct the value in the table. Click OK.
9. Assign Controls, if the plate contains control samples, using the same procedure. If you enter a dilution fold number in the Sample Dilution column, the software will calculate dilution-adjusted concentrations
10. Select the wells containing Unknowns, and click U to assign Unknowns.
11. In the Assign Unknown Sample to Wells window, enter number of replicates and direction; enter any Sample Dilution factor (if needed). Click OK.
12. Assign units for the plate by clicking Unit.
13. Sample IDs may be typed in for each well in the corresponding Assign window, or may be copied and pasted or imported. This is covered in a separate Quick Reference Guide.
14. Save the plate layout (File → Save Plate Layout).
15. Close the plate layout (File → Close Plate Layout Editor).