

Selection Guide

*for MatTek Glass Bottom Dishes and
Glass Bottom Multiwell Plates*

How to....

*choose the correct dish for your
application?*

**This fast question/answer session will
help you select the proper dish for your
application.**



1. Should I use 35 mm or 50 mm diameter dishes, or one of the multiwell plates?

- **35** mm dishes are used for most applications.
- **50** mm dishes are usually chosen for microinjection work because of their larger diameter and lower side walls that allow for easier access to the cells.

Sample Part Numbers:

P35G-0-10-C

P50G-1.5-14-F

- For customers who want to prepare a large number of identical cultures, you may want to consider our 6-, 12-, 24-, or 96-well glass bottom plates.

P06G-0-10-F

P12G-0-14-F

2. What coverslip thickness should I use?

Glass bottom dishes are available with **No. 0**, **No. 1.0**, and **No. 1.5** coverslips. However, for most applications, **No. 1.5** is the preferred coverslip thickness, especially for optimizing image quality with high numerical aperture objectives. In some instances, your microscope manufacturer will specify a coverslip thickness (No.) for your microscope model and the specific objective you're using.

The **No. 0** coverslip gives you the most working distance and may be useful for thicker specimens.

Sample Part Numbers:

P50G-**1.5**-14-F

P35G-**0**-10-C

3. What diameter microwell should I use, 10 mm, 14 mm, or 20 mm?

- **10 mm:** If your application is cell-limited and/or you are concerned about media or reagent consumption, then you should choose the **10 mm** diameter microwell.
- **14 mm:** For most applications, a **14 mm** glass microwell is sufficient.
- **20 mm:** Choose the **20 mm** diameter microwell to maximize viewing area.

Sample Part Numbers:

P35G-0-14-C

P35G-1.5-20-C

4. Should I use a coated or uncoated coverslip? If I use coated, should I use poly-d-lysine or collagen coating?

- If your cells grow well on uncoated glass, then order the dishes that come with an uncoated coverslip (***P35G and P50G series***). If your cells do not grow on uncoated glass, try our ***poly-d-lysine*** coated (***P35GC and P50GC series***) or ***collagen*** coated dishes (***P35GCol series***).
- Poly-d-lysine is used for neuronal research since most neurons will not grow on uncoated glass. It is also useful for other primary cells as well. For other cell types such as endothelial, hepatocytes or muscle cells, collagen coating helps with cell attachment, spreading and rapid expansion of cell populations. All of our coated dishes are lot certified with primary hippocampal neurons.

Sample Part Numbers:

P35***GC***-0-14-C

P35***GCOL***-1.5-10-C

5. Should I use a dish with a gridded coverslip

- Some researchers would like to microinject specific cells and then be able to monitor individual cells as a function of time in culture. The use of gridded glass bottom coverslip dishes greatly facilitates such studies. See part #: P35G-2-14-C-**GRID** or P50G-2-14-F-**GRID**.
- Both products contain photo-etched gridded coverslips (*No. 2 thickness, alphanumeric grid of 520 coded squares. Each square is 600 x 600 μm*) from Bellco Glass.

Sample Part Numbers:

P35G-2-14-C-**GRID**

P50G-2-14-F-**GRID**

Summary

Based on your answers, you now know:

1 Dish diameter/plate type

- a. 35 or 50 mm diameter dish
- b. 6, 12, 24, and 96 multi-well plates

2 Glass thickness

Standard coverslip No. 0, 1.0, 1.5, or 2 are available.

3 Microwell Diameter

Glass surface that is 10, 14, or 20 mm in diameter.

4 Coating

Uncoated, poly-d-lysine or collagen coated dishes are available.