

# Corning® Elplasia® Round Bottom Plates

## Guidelines for Use

CORNING

### Introduction

Corning Elplasia plates are designed with microcavities within each well with an Ultra-Low Attachment (ULA) surface to enable formation of multiple, uniform spheroids in each well. Generation of multiple spheroids per well is important for assays that require a larger number of data points or increased assay signal without increasing spheroid size. Culture in the Corning Elplasia plates is straightforward, though it will require some optimization depending upon cell type, seeding density, and desired culture time.

### Materials

- ▶ Corning Elplasia multiwell plate
- ▶ Single cell suspension of interest
- ▶ Cell culture medium

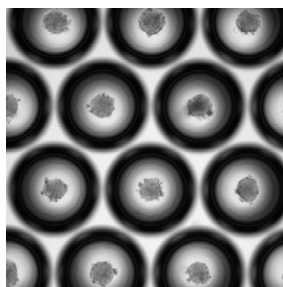
### Procedure

1. Remove protective film from the bottom of the Corning Elplasia multiwell plate.
2. Pre-wet the wells with cell culture medium, and centrifuge to remove trapped air from the microcavities. If there are microcavities with trapped air, cells in suspension will not settle into those structures. A good starting point is 500 x g for 1 minute. This may need to be increased depending on the medium used. We do not recommend centrifuging higher than 2,000 x g.

	6-well	24-well	96-well
Recommended pre-wet volume per well	1.5 mL	500 µL	50 µL

3. Calculate seeding density based on the number of desired cells in each microcavity. The approximate number of microcavities is listed below. We recommend between 100 to 1000 cells per microcavity depending on the application and cell type. The microcavities have a depth of approximately 400 µm. The larger the spheroid, the greater the risk of spheroids being dislodged out of microcavities during handling.

	6-well	24-well	96-well
Approximate number of microcavities per well	2885	554	79



Representative photomicrograph of 48-hour HT29 spheroids in Corning Elplasia plate microcavities. 40X total magnification.

4. Once trapped air is removed, add cell suspension to wells. To ensure uniform spheroid size in every microcavity, we recommend adding at least the same volume of cell suspension as pre-wet volume and gentle rocking of plate to distribute cells.
5. Culture cells for desired amount of time.  
We recommend avoiding media exchanges when possible to decrease the risk of dislodging spheroids out of the microcavities. If media exchanges are necessary, we recommend half media exchanges by adding droplets of media as gently as possible. Adding media when there are higher volumes already in the well can reduce the chances of disturbing the spheroids.  
Be especially gentle when transporting Corning Elplasia 6-well plates to avoid dislodging spheroids out of the microcavities.
6. To collect spheroids, pipette up and down with wide bore pipet tips or a Corning Stripette™ pipet to resuspend the spheroids in the well media prior to collection. Several washes may be required to recover all spheroids.

## Ordering Information

### Corning® Elplasia® Round Bottom Plates

Cat. No.	Description
4440	6-well plate, round bottom
4441	24-well plate, round bottom
4442	96-well microplate, round bottom

For more specific information on claims, visit the Certificates page at [www.corning.com/lifesciences](http://www.corning.com/lifesciences).

**Warranty/Disclaimer:** Unless otherwise specified, all products are for research use only. Not intended for use in diagnostic or therapeutic procedures. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications.

For additional product or technical information, visit [www.corning.com/lifesciences](http://www.corning.com/lifesciences) or call 800.492.1110. Outside the United States, call +1.978.442.2200 or contact your local Corning sales office.

# CORNING

**Corning Incorporated**  
*Life Sciences*

836 North St.  
Building 300, Suite 3401  
Tewksbury, MA 01876  
t 800.492.1110  
t 978.442.2200  
f 978.442.2476

[www.corning.com/lifesciences](http://www.corning.com/lifesciences)

#### ASIA/PACIFIC

**Australia/New Zealand**  
t 61 427286832

**China**  
t 86 21 3338 4338  
f 86 21 3338 4300

**India**  
t 91 124 4604000  
f 91 124 4604099

#### Japan

t 81 3-3586 1996  
f 81 3-3586 1291

#### Korea

t 82 2-796-9500  
f 82 2-796-9300

#### Singapore

t 65 6572-9740  
f 65 6735-2913

#### Taiwan

t 886 2-2716-0338  
f 886 2-2516-7500

#### EUROPE

CSEurope@corning.com

#### France

t 0800 916 882  
f 0800 918 636

#### Germany

t 0800 101 1153  
f 0800 101 2427

#### The Netherlands

t 020 655 79 28  
f 020 659 76 73

#### United Kingdom

t 0800 376 8660  
f 0800 279 1117

#### All Other European Countries

t +31 (0) 206 59 60 51  
f +31 (0) 206 59 76 73

#### LATIN AMERICA

grupoLA@corning.com

#### Brasil

t 55 (11) 3089-7400

#### Mexico

t (52-81) 8158-8400