

CELLSTAR® Cell Culture Microplates

Cell culture treated microplates are available in the following versions: 96, 384, 1536 well format

Properties

- ⦿ Improved cell adhesion through physical surface treatment
- ⦿ Compatible with automated systems. For further information concerning ANSI standards please visit our website: www.gbo.com/bioscience/technical_information
- ⦿ Alphanumeric well coding



An overview of all 96 well, 384 well and 1536 well microplates listed in this catalogue can be found in the Technical Appendix → p. A I 3 ff.



Detailed technical information on microplates

- p. 2 I 2 ff. HTS microplates
- p. 3 I 2 ff. Immunology
- p. 14 I 4 Barcode labelling of microplates

Further literature on cell culture treated microplates

- Application Note "Establishing a cell culture assay based on TR-FRET for screening G-Protein-coupled receptors" (F074 058)
- Application Note "Selection of cell culture surfaces for the adipogenic differentiation of hMSCs" (F010 003)

96 Well Polystyrene Cell Culture Microplates

Cell culture treated 96 well microplates are available in the following versions:

- ⦿ With U-, V- and F-bottom
- ⦿ Clear, black and white
- ⦿ Standard or half area microplates
- ⦿ Black and white "clear bottom" plates (μ Clear®)
- ⦿ Chimney well design, raised wells and condensation rings in lids prevent cross-contamination
- ⦿ With or without lid
- ⦿ Improved cell adhesion through physical surface treatment
- ⦿ Barcode-labelled on request

Properties

- ⦿ Lid enables gas exchange with minimal evaporation
- ⦿ High clarity of the clear microplates for optimal microscopic examinations
- ⦿ Stackable
- ⦿ Alphanumeric well coding
- ⦿ Individually wrapped peel-off bags
- ⦿ Consecutive lot numbering

Well Profile

Depending on the application, the well profile is a key feature in a 96 well cell culture microplate. For further information and figures on the well profiles see → p. 2 I 6 f.

1. U-Bottom

The "U" describes the round bottom shape.

- ⦿ No sharp corners to facilitate easy and residue-free pipetting
- ⦿ Suitable for +/- analyses
- ⦿ Working volume: 40 – 280 μ l

2. V-Bottom

The "V" stands for the conically tapered well bottom.

- ⦿ For precise pipetting
- ⦿ Suitable for +/- analyses
- ⦿ Working volume: 40 – 200 μ l

3. F-Bottom / Standard (ST)

The "F" refers to the flat well bottom.

- ⦿ Excellent optical properties
- ⦿ For precise optical measurements
- ⦿ For microscopic applications (bottom reading)
- ⦿ Cell growth area: 32 mm²
- ⦿ Working volume: 25 – 340 μ l

4. F-Bottom / Chimney Well

The chimney well cell culture microplate has the same well profile as the standard F-bottom plate. The difference to the standard plate is the chimney-like arrangement of the wells i.e. each well stands on its own. Therefore the risk of contamination from sample material being carried over is minimised.

- ⦿ Cell growth area: 34 mm²
- ⦿ Working volume: 25 – 340 μ l

μ Clear® / Solid Bottom

Clear bottom microplates have pigmented walls and a transparent thin film bottom, the so-called μ Clear® bottom. In contrast to our standard microplates with a solid polystyrene bottom, they are ideal for cell culture and microscopic applications using fluorescence or luminescence detection methods.

Half Area Microplates

For many applications, a reduction of the sample volume is an important feature. Beside high-format plates, the 96 well half area microplates offer an interesting alternative here. They can be pipetted automatically as well as manually without any problem and allow a reduction of the sample volume up to 50 %.

- ⦿ Cell growth area: 15.0 mm²
- ⦿ Working volume: 15 – 175 μ l



Bulk Packaging

For selected products Greiner Bio-One also offers user-friendly bulk packaging (Fig. 1). Additional products are available in bulk pack upon request.

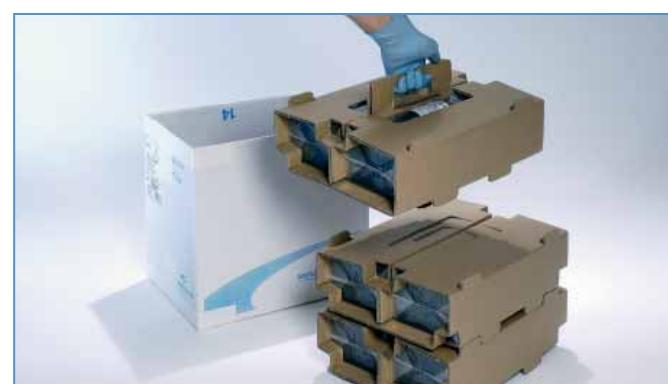


Figure 1: User-friendly bulk packaging



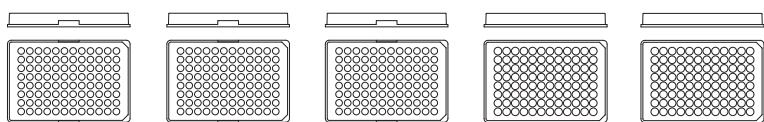
96 Well Polystyrene Cell Culture / Suspension Culture Microplates solid bottom, clear

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- ↳ Sealers, Lids and CapMats p. 12 | 2 ff.
- ↳ Barcode Labelling p. 14 | 4

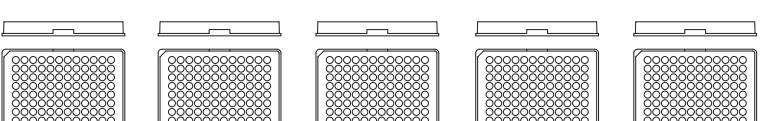
Free of detectable DNase, RNase,
human DNA
non-pyrogenic

non-cytotoxic

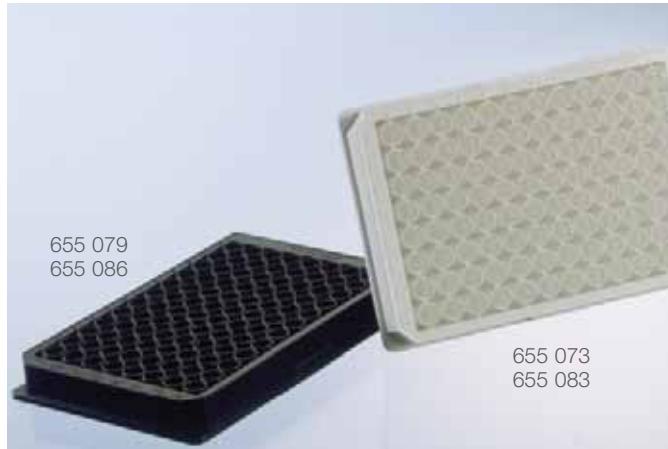
Cat.-No.	650 160	650 180	650 185	651 160	651 180
Well profile	U-bottom	U-bottom	U-bottom	V-bottom	V-bottom
Bottom	solid	solid	solid	solid	solid
Colour	clear	clear	clear	clear	clear
Growth area per well [mm ²]	35	35	-	28	28
Working volume per well [µl]	40 – 280	40 – 280	40 – 280	40 – 200	40 – 200
TC surface treatment	+	+	-/suspension	+	+
Sterile	+	+	+	+	+
Lid	-	+	+	-	+
Quantity per bag/case	1/100	1/100	1/60	1/100	1/100



Cat.-No.	655 160	655 162	655 180	655 182	655 185
Well profile	F-bottom/ chimney well				
Bottom	solid	solid	solid	solid	solid
Colour	clear	clear	clear	clear	clear
Growth area per well [mm ²]	34	34	34	34	-
Working volume per well [µl]	25 – 340	25 – 340	25 – 340	25 – 340	25 – 340
TC surface treatment	+	+	+	+	-/suspension
Sterile	+	+	+	+	+
Lid	-	-	+*)	+*)	+*)
Quantity per bag/case	1/100	5/100	1/100	10/160	1/60



*) with condensation rings



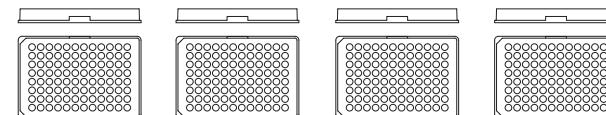
Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

96 Well Polystyrene Cell Culture Microplates

solid bottom, white / black

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Cat.-No.	655 073	655 083	655 079	655 086
Well profile	F-bottom/ chimney well	F-bottom/ chimney well	F-bottom/ chimney well	F-bottom/ chimney well
Bottom	solid	solid	solid	solid
Colour	white	white	black	black
Growth area per well [mm ²]	34	34	34	34
Working volume per well [µl]	25 – 340	25 – 340	25 – 340	25 – 340
TC surface treatment	+	+	+	+
Sterile	+	+	+	+
Lid	-	+ ^{*)}	-	+ ^{*)}
Quantity per bag/case	10/40	8/32	10/40	8/32

^{*)} with condensation rings



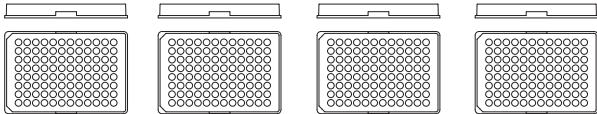
Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

96 Well Polystyrene Cell Culture Microplates

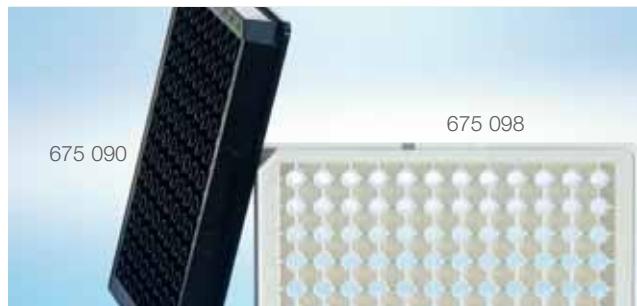
µClear®, white / black

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Cat.-No.	655 088	655 098	655 087	655 090
Well profile	F-bottom/ chimney well	F-bottom/ chimney well	F-bottom/ chimney well	F-bottom/ chimney well
Bottom	µClear®	µClear®	µClear®	µClear®
Colour	white	white	black	black
Growth area per well [mm²]	34	34	34	34
Working volume per well [µl]	25 – 340	25 – 340	25 – 340	25 – 340
TC surface treatment / Sterile	+ / +	+ / +	+ / +	+ / +
Lid	-	+*)	-	+*)
Quantity per bag/case	10/40	8/32	10/40	8/32

*) with condensation rings



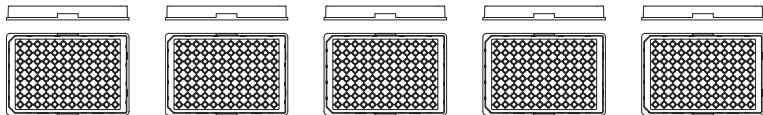
Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

96 Well Half Area Polystyrene Cell Culture Microplates

solid bottom, clear / white / black
µClear®, white / black

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Cat.-No.	675 180	675 083	675 086	675 098	675 090
Well profile	half area				
Bottom	solid	solid	solid	µClear®	µClear®
Colour	clear	white	black	white	black
Growth area per well [mm²]	15	15	15	15	15
Working volume per well [µl]	15 – 175	15 – 175	15 – 175	15 – 175	15 – 175
TC surface treatment / Sterile	+ / +	+ / +	+ / +	+ / +	+ / +
Lid	+	+	+	+	+
Quantity per bag/case	8/32	8/32	8/32	8/32	8/32