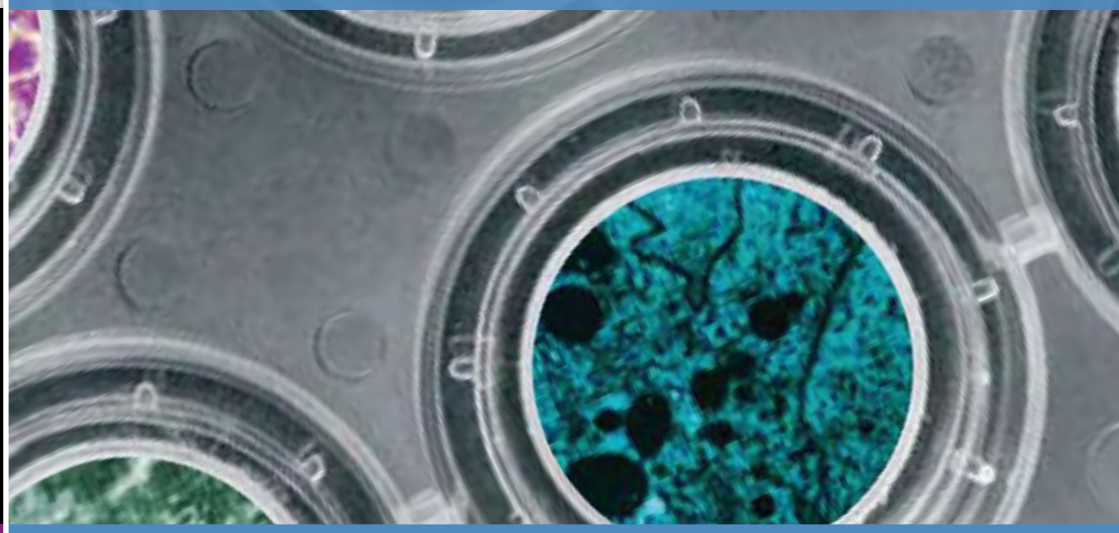
Thermo Scientific Plate Guide



nunc™

Thermo SCIENTIFIC

Thermo Scientific Plate Guide

Thermo Fisher Scientific has decades of experience designing and producing plates for researchers' increasingly sophisticated applications. The result is a very wide offering of the highest quality microplates.

In addition to Thermo Scientific and Thermo Scientific Nunc 96-well plates, we offer 384- and 1536-well formats with various well geometries for manual or automated applications. Specialty formats include Nunc™ OmniTray and Multidishes plus rectangular dishes. You can select from a variety of optical bottom plates with superior optical properties for luminescence and fluorescence use.

Our plates are often specified for use in colorimetric, fluorescent and luminescent assays. Other typical applications include cell culture, ELISA, cell imaging, cultivation, toxicity testing and storage.

Different plate materials are available for diverse applications. Polystyrene is popular for its optical clarity and for its ability to be modified. Polypropylene is a great selection for its compatibility with reagents and its resistance to chemicals and temperature extremes.

A variety of surface coatings offers you tremendous options in cell culture and immunology. Specific surfaces include those that are passive, hydrophobic, or hydrophilic while others offer varieties of covalent binding or ligand/receptor binding.

Common to all plates: adherence to ISO 13485 quality standards, easy availability of product certifications and quick access to knowledgeable technical support personnel.

Visit **www.plateguide.com** and use our online plate selection tool to help you find the best product for your application.

Thermo Scientific Plates and Accessories

Table of Contents

Number of Wells	Throughput	Automation
1, 4, 6, 8, 12, 16, 24, 48	Low to medium	As needed
96	Moderate	Common
384, 1536	High to ultra-high	Necessary

Plate Type	Description	Material	Applications
Solid	Single molded plate, one piece with solid bottom	Polypropylene (PP) or Polystyrene (PS)	Cell culture, homogeneous assays, ELISA, fluorescence, luminescence, storage
Optical Bottom	Black or white upper structure with clear bottom	PS upper structure with polymer or glass base	Cell imaging and assays, fluorescence
Filter	96 well 1mL plate with filters or binding membranes	PP plate with Polyethylene (PET) frit or frit plus glass fiber membrane	Filtration of cell debris and genomic DNA. Purification of plasmid DNA and PCR products

Well Abbreviation	Bottom Shape	Advantages
F	Flat Bottom	Optical imaging, cell culture
C	Rounded Corners and Flat Bottom	Advantages of flat bottom with efficient washing
U	Round Bottom	Optimal washing, mixing, examination of pellet
V	Conical Bottom	Precipitation, centrifugation, small volume recovery

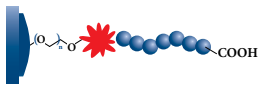
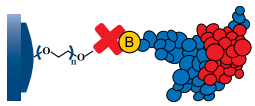
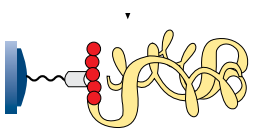
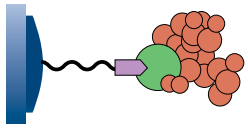
Plate Color	Key Application
Clear	Colorimetric Assays, Cell Culture, ELISA
Black	Fluorescent Assays
Natural	Storage
White	Luminescent Assays
Red	Available Choice
Blue	Available Choice
Yellow	Available Choice

Material	Chemical Resistance	Binding Capacity	Plastic Characteristics	Applications
Polystyrene (PS)	Low	Low to very high depending on surface treatment	Hard, clear	Homogeneous assays, ELISA, cell culture, fluorescence, luminescence
Polypropylene (PP)	High	Very low	Softer, more opaque	Storage, fluorescence, luminescence

Cell Culture		
Surface	**Description**	**Applications**
Nunclon∆	Proprietary energetic surface modification, performance certified with four cell lines	General Cell Culture
Cell Culture	Proprietary energetic surface modification	General Cell Culture
Poly-D-Lysine	Synthetic polymeric coating with positive charge	Culture of Fastidious Cells
Collagen I	Type 1 Collagen from rat tail; a component of the extracellular matrix	Culture of Fastidious Cells
CC^2	Proprietary, aminated surface, analogous to Poly-D-Lysine	Culture of Fastidous Cells
UpCell	Cell detachment enhanced by temperature reduction	Preserving Cell Surface Proteins Creating 3D Tissue Models
HydroCell	Enables cultivation of cells that are sensitive to unwanted activation and differentiation signals arising from cell adhesion	Single Cells and Cell Clusters in Suspension

Homogeneous Assays		
Untreated	No treatment or material applied to the plate	Assays

Immuno Assay (Passive Adsorption)			
Surface	**Hydrophilicity**	**Binding Preference**	**Applications**
PolySorp	–	Lipids, lipoproteins, large proteins	ELISA
MediSorp	+	Medium to large proteins, immunoglobulins, albumins	ELISA
MaxiSorp	++	Small to large proteins, immunoglobulins, albumins, LPS, phosphoproteins, glycoproteins	ELISA
MultiSorp	+++	Glycoproteins, polar lipids, phospholipids, cardiolipids	ELISA

Immuno Assay and Hybridization (Covalent Coupling)				
Surface	**Structure**	**Binding Preference**	**Applications**	**Molecular Drawings**
Immobilizer Amino	Reactive electrophile tethered by spacer arm	Proteins, nucleic acids with free NH_2 or SH groups	ELISA, Hybridization Assays	
Immuno Assay and Hybridization (Covalent Coupling)				
Immobilizer Steptavidin	Streptavidin covalently coupled via spacer arm	Biotinylated biomolecules	Immunoassays, PCR ELISA, Hybrid-ization Assays	
Immobilizer Nickel Chelate	Nickel Chelate covalently coupled via spacer arm	6x His fusion proteins	Immunoassays, Protein-Nucleic Acid Assays	
Immobilizer Glutathione	Glutathione covalently coupled via spacer arm	Glutathione transferase fusion proteins	Immunoassays, Protein-Nucleic Acid Assays	

Online Barcode Configurator

Simple sample tracking using custom barcodes

The Thermo Scientific Nunc Barcode Configurator provides an easy, convenient way to design and order custom barcoded Nunc plates. A step-by-step website - www.barcodeconfigurator.com – lets you quickly build the barcoding label scheme that is best for your application.

- Quick turnaround – 4 to 6 weeks average
- Print a sample drawing and barcode - ensure compatibility with your reader
- Choose from 5 code types – match your existing barcodes
- Select label location – one or more plate sides
- No repeats – guaranteed
- Your sequences archived – with safe, secure access
- Human readable options – positions and highlight color

Barcoding is the safest way to track your samples

Scanning barcodes is more accurate and substantially faster than manual entry.
Thermo Scientific Nunc barcode labels are extremely durable to ensure reliable, consistent scanning. Barcodes are suitable for manual or automated operations. When scanners are not available, selected products offer trouble-free human readable code options.

Select the best code for your application

After reviewing your current barcode system or when starting your bar code scheme, your choices include:

- Number of digits
- Code type
- Numerical or alphanumerical
- Label location
- Prefixes or suffixes

For further information and to download the barcoded plates request, visit www.barcodeconfigurator.com.

Find information on all of the following Thermo Scientific products in the next section of this book.

- Nunc Plates
- Plates
- Nunc Accessories
- Nunc Lids
- Nunc Sealing Tapes
- Nunc Tapes and Washers
- Nunc Barcode Scanners
- Microplate Readers

Plate Guide

NEW

Choosing the right plate will give you the best possible results, as well as save time and money. This plate guide will help you to select the best possible plate for your application. Simply enter your selected criteria and view the range of plates matching your request.

Technical drawings of the plates are also available.

Example

Format

○ **Any**	○ 24 Well
○ 6 Well	○ 48 Well
○ 8 Well	○ 96 Well
○ 12 Well	○ 384 Well
○ 16 Well	○ 1536 Well

Polymer

- ○ **Any**
- ○ PP (Polypropylene)
- ○ PS (Polystyrene)

Type

- ○ **Any**
- ○ Solid
- ○ Strip
- ○ OBP (Optical Bottom Plate)

Sterile

- ○ **Any**
- ○ Yes
- ○ No

Bottom

- ○ **Any**
- ○ Conical
- ○ Flat
- ○ Round
- ○ C-shaped

Surface

○ **Any**	○ Streptavidin Covalent
○ Non-treated	○ Streptavidin Passive
○ MultiSorp	○ Amino
○ MaxiSorp	○ Collagen I
○ MediSorp	○ CC²
○ PolySorp	○ CC³
○ NucleoLink	○ Cell Culture
○ Glutathione	○ UpCell
○ Nickel-Chelate	○ HydroCell

Color

○ **Any**	○ Natural
○ Clear	○ Red
○ White	○ Blue
○ Black	○ Yellow

• Save time
• Save money
• Get better results

This plate guide will help you select the optimal plate for your application. Try the Plate Guide now at www.plateguide.com.

OmniTray, Polystyrene

- Ideal for screening libraries
- Useful for DNA hybridization methods
- Also suitable for standard petri dish techniques and bacterial growth

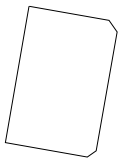
Acts as:

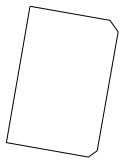
- Holder for membrane when dot blotting
- Container for denaturation, hybridization and washing steps
- Storage container for membranes

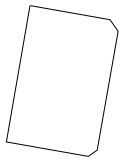
- Same external foot print dimensions as a 96 well Thermo Scientific Nunc MicroWell plate
- Optical clarity makes colonies easy to see
- Can be stacked safely
- Walls are high and sturdy
- Can be frozen at -20°C

Single well OmniTray ideal for a multitude of uses

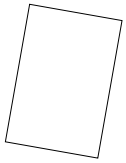
- Available as a standard version with notched corners and as a rectangular version optimized for computerized imaging and spotting
- Thermo Scientific Nunclon∆ certified available

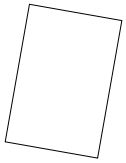


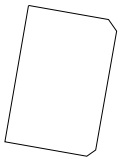




Cat. No.	242811	264728	250385
Description	OmniTray with lid	Omnitray with lid	Pall Biodyne™ B nylon membrane
Color	Clear	Clear	Clear
Sterile	Yes	Yes	Yes
Total volume, ml	90	90	90
Suggested working vol., ml	38	35	–
External dimensions, mm	128 x 86	128 x 86	115 x 76
Units per pack/case	10/60	10/90	20/20







Cat. No.	140156*	140175*	165218
Description	Nunclon™∆ treated OmniTray with lid	Nunclon∆ treated OmniTray with lid	Nunclon∆ treated OmniTray with lid
Color	Clear	White	Clear
Sterile	Yes	Yes	Yes
Culture area, cm^2	84	84	90
Suggested working vol., ml	90	90	90
External dimensions, mm	128 x 86	128 x 86	128 x 86
Units per pack/case	10/90	10/90	10/60

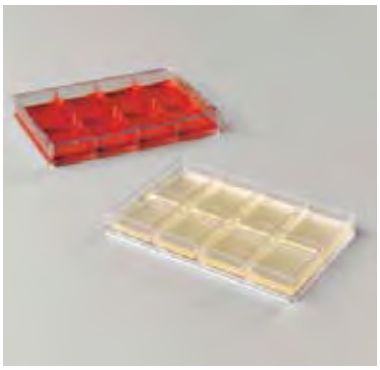
** Enhanced rectangular area ideal for automatic picking and viewing system*

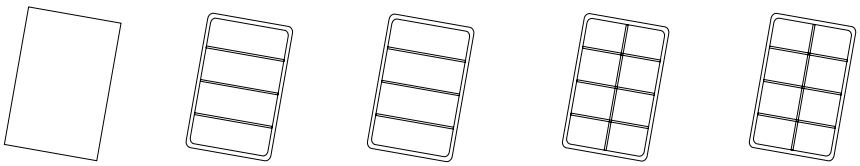
Rectangular Dishes, Polystyrene

1 Well
- HTS Petri Dish applications
- Convenient plate format for cell culture

4 and 8 wells
- Assay compartmentalization
- Probe multiple gene subsets
- Wash Western blot strips
- 4-Well dish holds four glass slides
- Useful in areas of cell culture, including scale-up and cloning

Untreated
- Molecular biology applications
- Consistent cell attachment and growth
- ANSI standard dimensions
- Instrument compatibility



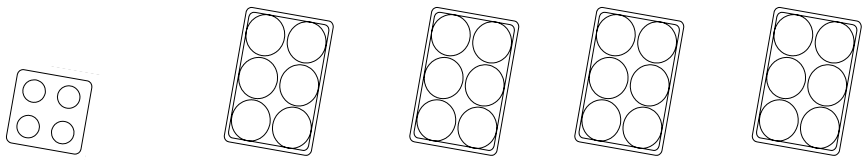


Cat. No.	267060	167063*	267061	167064*	267062
Description	Non-treated	Nunclon∆ treated	Non-treated	Nunclon∆ treated	Non-treated
Number of wells	1	4	4	8	8
Color	Clear	Clear	Clear	Clear	Clear
Sterile	Yes	Yes	Yes	Yes	Yes
With lid	Yes	Yes	Yes	Yes	Yes
External dimensions, mm	128 x 86	128 x 86	128 x 86	128 x 86	128 x 86
Units per pack/case	10/100	10/100	10/100	10/100	10/100

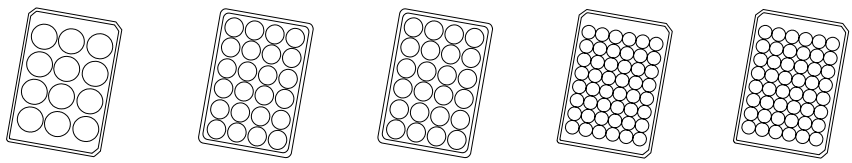
** This product pictured on page 8*

MultiDishes, Polystyrene

- Useful in all areas of cell culture including scale-up and cloning
- Raised well rims to lower risk of cross contamination
- Excellent optical quality
- All MultiDishes™ are available as NunclonΔ certified
- MultiDish 6 is available treated with Poly-D-Lysine or Collagen I



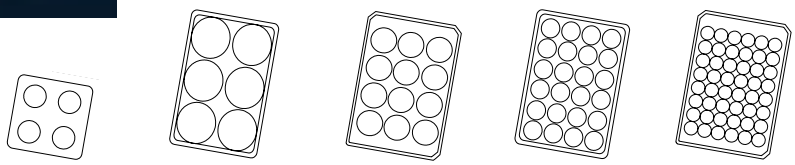
Cat. No.	176740	140675	140685	152035	152034
Description	NunclonΔ treated	NunclonΔ treated	NunclonΔ treated	Poly-D-Lysine	Collagen I, rat tail
Number of wells	4	6	6	6	6
Bottom shape	Flat	Flat	Flat	Flat	Flat
Sterile	Yes	Yes	Yes	No	No
Suggested working vol., ml/well	1	3	3	3	3
Culture area, cm^2/well	1.9	9.6	9.6	9.6	9.6
External dimensions, mm	66 x 66	128 x 86	128 x 86	128 x 86	128 x 86
Units per pack/case	4/120	1/75	5/85	5/20	5/20



Cat. No.	150628	142475	142485	150687	152640
Description	NunclonΔ treated	NunclonΔ treated	NunclonΔ treated	NunclonΔ treated	NunclonΔ treated
Number of wells	12	24	24	48	48
Bottom shape	Flat	Flat	Flat	Flat	Flat
Sterile	Yes	Yes	Yes	Yes	Yes
Suggested working vol., ml/well	2	1	1	0.5	0.5
Culture area, cm^2/well	3.5	1.9	1.9	1.1	1.1
External dimensions, mm	128 x 86	128 x 86	128 x 86	128 x 86	128 x 86
Units per pack/case	1/75	1/75	5/85	1/75	5/85

MultiDishes, Polystyrene

- Non-treated, sterile MultiDishes for suspension cell cultures
- Raised well rims to lower risk of cross contamination
- Excellent optical quality
- Non-pyrogenic
- Thermo Scientific Nunc HydroCell - ultra-low cell binding surface inhibits cell attachment and differentiation
- Thermo Scientific Nunc UpCell - thermo-responsive surface enables cell harvesting without the use of trypsin or cell scrapers. Preserves surface proteins and cell-to-cell extracellular matrix.

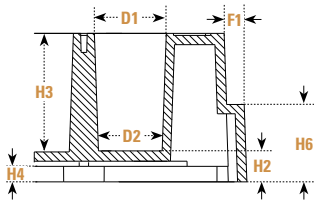


Cat. No.	179820	150239	150200	144530	150787
Description	Non-treated	Non-treated	Non-treated	Non-treated	Non-treated
Number of wells	4	6	12	24	48
Bottom shape	Flat	Flat	Flat	Flat	Flat
Sterile	Yes	Yes	Yes	Yes	Yes
Suggested working vol., ml/well	1	3	2	1.0	0.5
External dimensions, mm	66 x 66	128 x 86	128 x 86	128 x 86	128 x 86
Units per pack/case	4/120	1/75	1/75	1/75	1/75

Cat. No.	174919	174910	174909
Description	HydroCell™	HydroCell	HydroCell
Number of wells	6	12	24
Bottom shape	Flat	Flat	Flat
Sterile	Yes	Yes	Yes
Suggested working vol., ml/well	3	2	1
External dimensions, mm	128 x 86	128 x 86	128 x 86
Units per pack/case	1/6	1/6	1/6

Cat. No.	174901	174900	174899	174898
Description	UpCell™	UpCell	UpCell	UpCell
Number of wells	6	12	24	48
Bottom shape	Flat	Flat	Flat	Flat
Sterile	Yes	Yes	Yes	Yes
Suggested working vol., ml/well	3.0	2.0	1.0	0.5
External dimensions, mm	128 x 86	128 x 86	128 x 86	128 x 86
Units per pack/case	1/6	1/6	1/6	1/6

F96 MicroWell Plates, Polystyrene



High Flange Design

Pinchbar Design

(Cat. Nos. 269620, 269787, 439454, 442404 and 475094)

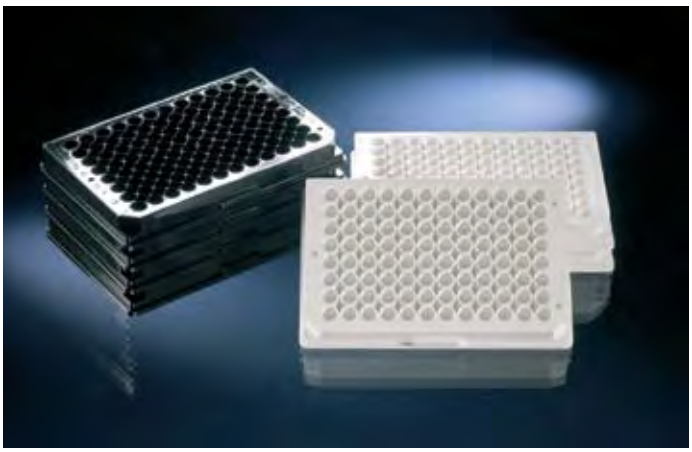
		mm
	Total height of plate	**14.4 ± 0.2**
H2	Vertical distance from inside well bottom to resting plane	3.0
H3	Inside depth of well	11.4
H4	Vertical distance from external well bottom to resting plane	1.9
H5	Height of flange on the short side	2.4
H6	Height of flange on the long side	7.4
D1	Well diameter, top	7.0
D2	Well diameter, bottom	6.2
F1	Depth of flange	1.7

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	Barcode	Units per pack/case
145397	Low Cell Binding	Clear	300	Irradiated	Yes	No	1/8
156545*	NunclonΔ	Clear	400	Yes	No	No	10/180
161093*	NunclonΔ	Clear	400	Yes	Yes	No	10/160
167008*	NunclonΔ	Clear	400	Yes	Yes	No	1/50
168055*	NunclonΔ	Clear	400	Yes	No	No	1/50
152038	Collagen I	Clear	400	No**	Yes	No	5/20
152039	Poly-D-Lysine	Clear	400	No**	Yes	No	5/20
174897	UpCell	Clear	200	Yes	Yes	No	1/8
174907	HydroCell	Clear	200	Yes	Yes	No	1/8
256510‡	Non-treated	Clear	400	Yes	No	No	10/180
260836	Non-treated	Clear	400	No	No	No	10/180
260844	Non-treated	Clear	400	No	No	Yes	10/180
260860	Non-treated	Clear	400	Yes	Yes	No	10/180
260887	Non-treated	Clear	400	Yes	Yes	Yes	10/160
260895	Non-treated	Clear	400	No	Yes	No	10/160
456529	PolySorp	Clear	400	No	No	No	10/180
456537*	MaxiSorp	Clear	400	No	No	No	10/180
460984*	MaxiSorp	Clear	400	No	No	Yes	10/180
467320*	MediSorp	Clear	400	No	No	No	5/60
467340*	MultiSorp	Clear	400	No	No	No	5/60
266120†	Non-treated	Clear	400	Yes	Yes	No	25/100
269620	Non-treated	Clear	400	No	No	No	5/60
269787	Non-treated	Clear	400	Yes	No	No	1/50
439454*	MaxiSorp	Clear	400	No	No	No	5/60
442404	MaxiSorp	Clear	400	No	No	No	5/60
475094	PolySorp	Clear	400	No	No	No	5/60

** Certified **Produced in a clean environment*
‡Not available in Americas † Americas Only

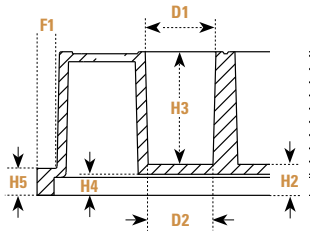
The manufacture and use of synthetic materials for solid phase immuno assays as covered under EU Patent No. 0126392 and US Patent No. 4,980,299 is licensed to Thermo Fisher Scientific.

F96 Immobilizer MicroWell Plates, Polystyrene



Pinchbar Design

- Covalent attachment
- High signal sensitivity and specificity
- High signal to noise ratio
- Amino surface for rapid coupling of peptides, proteins and DNA
- Streptavidin surface for rapid coupling of biotinylated biomolecules such as peptides, antibodies, oligonucleotides or haptens
- Glutathione surface for rapid coupling of GST-tagged fusion proteins
- Ni-Chelate surface for rapid coupling of 6x Histidine-tagged proteins

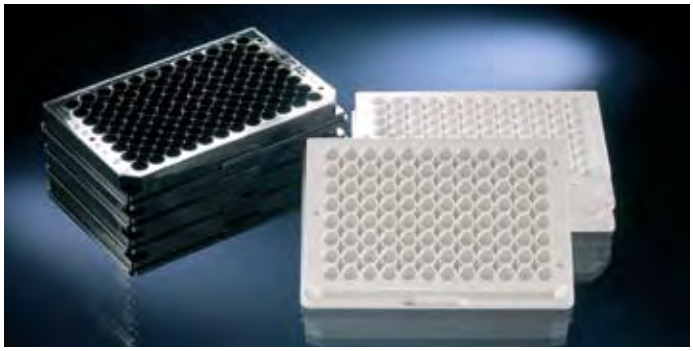


		mm
	Total height of plate	**14.5 ± 0.2**
H2	Vertical distance from inside well bottom to resting plane	3.2
H3	Inside depth of well	11.2
H4	Vertical distance from external well bottom to resting plane	2.1
H5	Height of flange	2.85 ± 0.15
D1	Well diameter, top	7.05 ± 0.2
D2	Well diameter, bottom	6.5
F1	Depth of flange	2.0

Cat. No.	Surface	Color	Total vol., µl/ well	Sterile	With lid	Units per pack/case
436006	Amino	Clear	400	No	No	5/30
436007	Amino	White	400	No	No	5/30
436008	Amino	Black	400	No	No	5/30
436014	Streptavidin	Clear	400	No	No	1/15
436015	Streptavidin	White	400	No	No	1/15
436016	Streptavidin	Black	400	No	No	1/15
436024	Ni-Chelate	Clear	400	No	No	1/15
436026	Ni-Chelate	White	400	No	No	1/15
436027	Ni-Chelate	Black	400	No	No	1/15
436032	Glutathione	Clear	400	No	No	1/15
436033	Glutathione	White	400	No	No	1/15
436034	Glutathione	Black	400	No	No	1/15

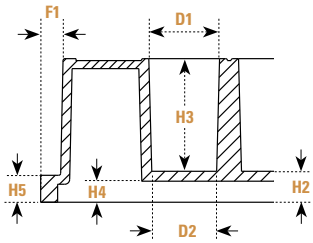
The manufacture and use of synthetic materials for solid phase immuno assays as covered under EU Patent No. 0126392 and US Patent No. 4,980,299 is licensed to Thermo Fisher Scientific.

F96 MicroWell Plates, Polystyrene, Black and White



- White plates provide maximum reflection, minimum auto-fluorescence and autoluminescence
- Black plates provide minimal background and light scatter in fluorescence assays
- Low crosstalk
- Thermo Scientific Nunc MaxiSorp and PolySorp for solid phase immuno assays
- NunclonΔ for cell based assays
- Working volume range: 50 -250 µl/well

Pinchbar Design



		mm
	Total height of plate	**14.6 ± 0.3**
H2	Vertical distance from inside well bottom to resting plane	3.6
H3	Inside depth of well	11.2
H4	Vertical distance from external well bottom to resting plane	2.1
H5	Height of flange	2.7
D1	Well diameter, top	7.05
D2	Well diameter, bottom	6.55 ± 0.1
F1	Depth of flange	2.0

Cat. No.	Surface	Color	Total vol., µl/ well	Sterile	With lid	Units per pack/case
136101*	NunclonΔ	White	400	Yes	Yes	1/50
136102*	NunclonΔ	White	400	Yes	Yes	10/160
137101*	NunclonΔ	Black	400	Yes	Yes	1/50
137103*	NunclonΔ	Black	400	Yes	Yes	10/160
236105	Non-treated	White	400	Yes	Yes	1/50
236107‡	Non-treated	White	400	Yes	Yes	10/160
236108	Non-treated	White	400	No	No	10/180
237105	Non-treated	Black	400	Yes	Yes	1/50
237108	Non-treated	Black	400	No	No	10/180
436110*	MaxiSorp™	White	400	No	No	10/80
437111*	MaxiSorp	Black	400	No	No	10/80
436111	PolySorp®	White	400	No	No	10/80
437112	PolySorp	Black	400	No	No	10/80

** Certified*
‡Not available in Americas

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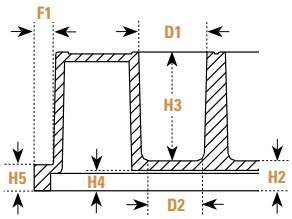
C96 MicroWell Plates, Polystyrene

- C-shaped bottom for optimal washing and liquid retrieval
- Thermo Scientific FluoroNunc for fluorescence based immuno-assays with minimal auto-fluorescence
- MaxiSorp and PolySorp for quantitative and qualitative solid phase immuno-assays
- Streptavidin surface for coupling of biotinylated biomolecules such as peptides, antibodies, oligonucleotides or haptens
- Thermo Scientific Nunc NucleoLink surface for covalent heat-stable binding of DNA; optimized for DNA hybridization assays
- Working volume range: 50 -250 µl/well

Pinchbar Design

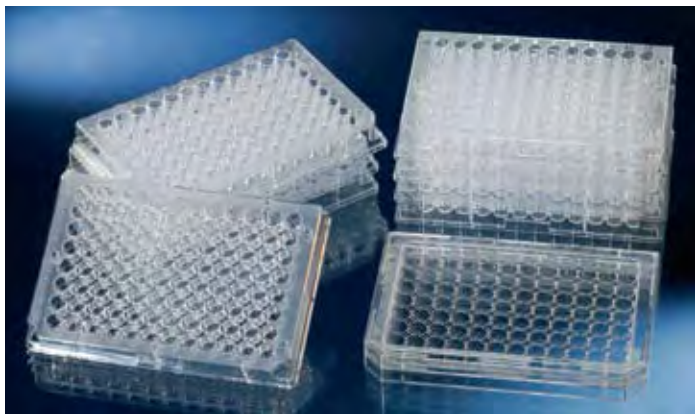


		mm
	Total height of plate	**14.0 ± 0.3**
H2	Vertical distance from inside well bottom to resting plane	3.1
H3	Inside depth of well	11.0
H4	Vertical distance from external well bottom to resting plane	2.1
H5	Height of flange	2.7
D1	Well diameter, top	6.6
D2	Well diameter, bottom	6.1
F1	Depth of flange	1.2

Cat. No.	Surface	Color	Total vol., µl/ well	Sterile	With lid	Units per pack/case
236001‡	Streptavidin	Clear	350	No	No	1/15
248150‡	NucleoLink™	Clear	350	No	No	5/30
430341*	MaxiSorp™	Clear	350	No	No	5/60
446612*	MaxiSorp	Clear	350	No	No	5/60
437958*	MaxiSorp	Clear	350	No	No	5/60
437796*	MaxiSorp	White	350	No	No	5/60
446140	PolySorp®	Clear	350	No	No	5/60
437869‡	PolySorp	Clear**	350	No	No	5/60
437842	PolySorp	White	350	No	No	5/60

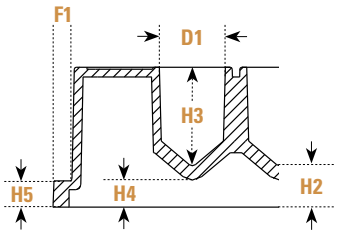
** Certified*
***FluoroNunc™*
‡Not available in Americas

V96 MicroWell Plates, Polystyrene, Clear



- Applications include: antibiotic screens, serological tests, storing and screening compounds and DNA libraries
- The wells have raised rims and lids are supplied with rings, which prevent cross-contamination
- Well shape maximizes sample recovery
- Working volume range: 50 -250 µl/well

Pinchbar Design



		mm
	Total height of plate	**14.4 ± 0.1**
H2	Vertical distance from inside well bottom to resting plane	4.6
H3	Inside depth of well	9.8
H4	Vertical distance from external well bottom to resting plane	2.8
H5	Height of flange	2.7
D1	Well diameter, top	6.8
D2	Well diameter, bottom	V-shaped
F1	Depth of flange	1.2

Cat. No.	Surface	Color	Total vol., µl/ well	Sterile	With lid	Units per pack/case
249662	Non-treated	Clear	300	Yes	No	1/50
277143‡	Non-treated	Clear	300	Yes	Yes	1/50
249935	Non-treated	Clear	300	Yes	Yes	10/80
249940	Non-treated	Clear	300	Yes	No	10/80
249952	Non-treated	Clear	300	Yes	Yes	10/160
249570	Non-treated	Clear	300	No	No	10/180

‡Not available in Americas

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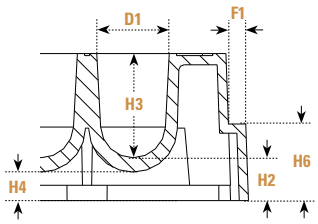
U96 MicroWell Plates, Polystyrene, Clear

- Clear plates with excellent optical clarity
- MaxiSorp and PolySorp for solid phase immuno assays
- NunclonΔ surface for cell based assays
- Sterile version for bacteriological applications
- Working volume range: 50 -250 µl/well

High Flange Design



		mm
	Total height of plate	**14.5 ± 0.1**
H2	Vertical distance from inside well bottom to resting plane	4.2
H3	Inside depth of well	10.2
H4	Vertical distance from external well bottom to resting plane	2.8
H5	Height of flange on the short side	2.4
H6	Height of flange on the long side	7.5
D1	Well diameter, top	7.1
D2	Well diameter, bottom	Round bottom
F1	Depth of flange	1.7

Cat. No.	Surface	Color	Total vol., µl/ well	Sterile	With lid	Units per pack/case
145399	Low Cell Binding	Clear	300	Irradiated	Yes	1/8
143761*	NunclonΔ	Clear	300	Yes	No	1/50
163320*	NunclonΔ	Clear	300	Yes	Yes	1/50
168136*	NunclonΔ	Clear	300	Yes	Yes	10/160
174908	HydroCell	Clear	200	Yes	Yes	1/8
262162	Non-treated	Clear	300	Yes	No	1/50
268152	Non-treated	Clear	300	No	No	10/180
268200	Non-treated	Clear	300	Yes	Yes	10/160
449824	MaxiSorp	Clear	300	No	No	5/60
475434	PolySorp	Clear	300	No	No	5/60

** Certified*

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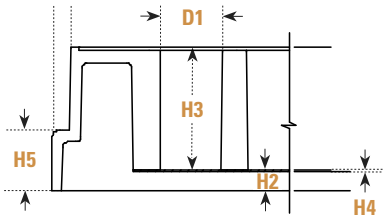
96 Well Optical Bottom Plates, Polymer Base

- NunclonΔ, Poly-D-Lysine or Collagen I surfaces for cell culture
- Non-treated plates are optimized for scintillation counting
- White or black upper structure with polymer bottom plates combine the optical clarity of virgin crystalline polystyrene with optimal surface for a wide range of HTS applications
- Working volume range: 50-200 µl/well

High Flange Design

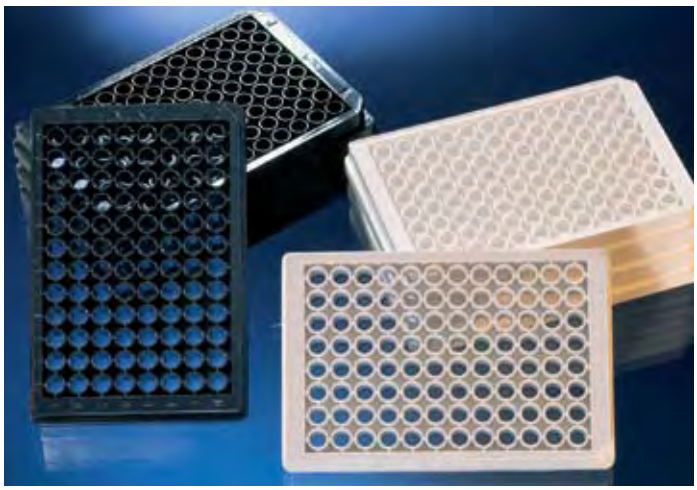


		mm
	Total height of plate	**14.85**
H2	Vertical distance from inside well bottom to resting plane	2.2
H3	Inside depth of well	12.2
H4	Polystyrene film	0.25
H5	Height of flange	6.2
D1	Well diameter	6.5

Cat. No.	Surface	Color	Total vol., µl/ well	Sterile	With lid	Units per pack/case
165306	Cell Culture	White	400	Yes	Yes	10/30
165305	Cell Culture	Black	400	Yes	Yes	10/30
152040	Collagen I	White	400	No*	Yes	5/20
152036	Collagen I	Black	400	No*	Yes	5/20
152028	Poly-D-Lysine	White	400	No*	Yes	5/20
152037	Poly-D-Lysine	Black	400	No*	Yes	5/20
265302	Non-treated	White	400	No	No	10/30
265301	Non-treated	Black	400	No	No	10/30

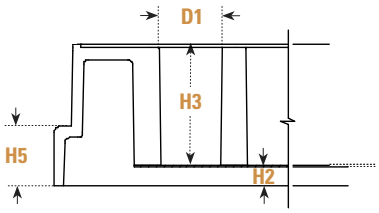
**Produced in clean environment*

96 Well Optical Bottom Plates, Polystyrene/Coverglass



- White or black upper structure with coverglass bottom for minimum light scatter and low auto-fluorescence, ensuring accurate results due to higher signal-to-noise ratio
- Optimum clarity for viewing well contents
- Thermo Scientific Nunc CC^2 surface treatment closely mimics a biological surface similar to Poly-D-Lysine and is a superior surface for attachment and growth of fastidious cells
- Non-treated plates are optimized for fluorescence
- Working volume range: 50-200 µl/well

High Flange Design



		mm
	Total height of plate	**14.85**
H2	Vertical distance from inside well bottom to resting plane	2.2
H3	Inside depth of well	12.2
H5	Height of flange	6.2
D1	Well diameter	6.5

Cat. No.	Surface	Color	Total vol., µl/well	Glass thickness*	Sterile	With lid	Units per pack/case
164588	Cell Culture	Black	400	1.5	Yes	Yes	6/30
164590	Cell Culture	White	400	1.5	Yes	Yes	6/30
160376	CC$^{2™}$	Black	400	1.5	Yes	Yes	6/30
265300	Non-treated	Black	400	1.5	No	No	5/30

**No 1.0 = 0.13-0.16 mm, No. 1.5 = 0.16-0.19mm*

U96/V96 MicroWell Plates, Polypropylene

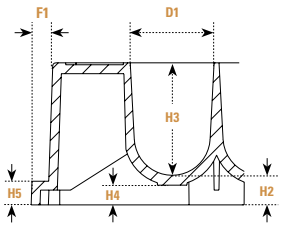
U96 Well Plates

- Shared wall technology increases well volume and wider cells improve mixing
- Ideal as collection plate for Thermo Scientific Nunc Filter Plates
- Resistant to most solvents used in combinatorial chemistry
- Working volume range: 20-450 µl/well

V96 Well Plates

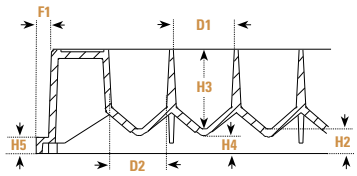
- V-shape provides optimal recovery of reagents
- Shared wall technology increases well volume and wider cells improve mixing
- Ideal as collection plate for Nunc Filter Plates
- Low binding for homogeneous assays and storage
- Working volume range: 10-400 µl/well

U96 Well Plates



		mm
	Total height of plate	**14.5 ± 0.3**
H2	Vertical distance from inside well bottom to resting plane	3.1
H3	Inside depth of well	11.2
H4	Vertical distance from external well bottom to resting plane	2.0
H5	Height of flange on the short side	2.4
D1	Well diameter, top	8.5
F1	Depth of flange	1.7

V96 Well Plates



		mm
	Total height of plate	**14.4 ± 0.1**
H2	Vertical distance from inside well bottom to resting plane	3.4
H3	Inside depth of well	11.0
H4	Vertical distance from external well bottom to resting plane	2.5
H5	Height of flange on the short side	2.3
H6	Height of flange on the long side	7.5
D1	Well diameter, top	8.5
D2	Well diameter, bottom	V-bottom
F1	Depth of flange	1.7

High Flange Design

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	Units per pack/case
U-well Plates						
267245	Non-treated	Natural	500	No	No	10/120
267334	Non-treated	Natural	500	Yes	No	10/120
267342	Non-treated	Black	500	No	No	10/120
267350	Non-treated	White	500	No	No	10/120
267369	Non-treated	Red	500	No	No	10/120
267385	Non-treated	Blue	500	No	No	10/120
267407	Non-treated	Yellow	500	No	No	10/120
V-well Plates						
249944	Non-treated	Natural	450	No	No	20/120
249946	Non-treated	Natural	450	Yes	No	20/120
249945	Non-treated	Black	450	No	No	20/120
249949	Non-treated	White	450	No	No	20/120
249943	Non-treated	Red	450	No	No	20/120
249947	Non-treated	Blue	450	No	No	20/120
249950	Non-treated	Yellow	450	No	No	20/120
442587*	Non-treated	Natural	300	No	No	5/60

**Pinchbar design*

96 Filter Plates 1.3 ml, Polypropylene

- For efficient purification of high quality plasmid DNA or PCR* products
- Designed specifically for high throughput sample processing
- Conforms to standard 96 well footprint
- Made of polypropylene offering chemical resistance and mechanical strength
- Suitable for vacuum filtration, centrifugation or positive pressure techniques
- Polyethylene terephthalate (PET) frit in fritted plate has 20 µm pore size
- Glass fiber plate has PET frit and 2 layers of glass fiber membrane for binding of DNA
- Shared wall configuration gives reduced plate height, wider wells for faster processing, higher yields and less clogging
- Purified DNA is suitable for downstream applications such as sequencing and restriction digestion

Flow diagram for plasmid DNA purification

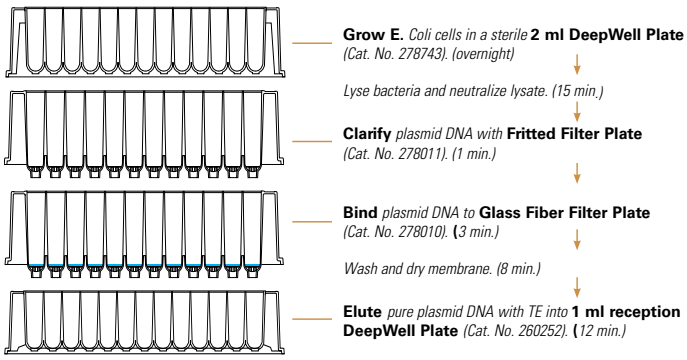


Figure 1. Procedure on how to use Nunc Filter Plates for cost effective DNA purification.

Cat. No.	Description	Total vol., ml/well	Working vol., ml/well	Frit size, µm	Sterile	Units per pack/case
278010	Glass Fiber 96 Well Filter (Binding) Plate	1.3	1.0	20*	No	5/50
278011	Fritted 96 DeepWell Plate	1.3	1.0	20	No	5/50
278012	Unfritted 96 DeepWell Plate	1.3	1.0	-	No	5/50

**Glass fiber plate has PET frit and 2 layers of glass fiber membrane for binding of DNA*

U96 DeepWell™ Plates 1.3 ml and 2.0 ml, Polypropylene

- Unique low design with shared wall technology for increased well volume. Optimum storage capacity and improved mixing
- Round well shape reduces liquid retention
- Ideal for sample collection, storage, combinatorial chemistry and library applications
- Widely used for bacterial and yeast growth
- Ideal as collection plates for Nunc Filter Plates
- Working volume range:
  Cat Nos. 260251 and 260252: 50-1000 µl/well
  Cat Nos. 278743 and 278752: 50-1900 µl/well

1.3 ml

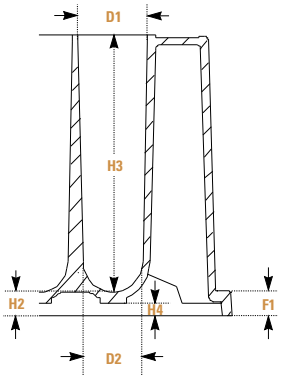
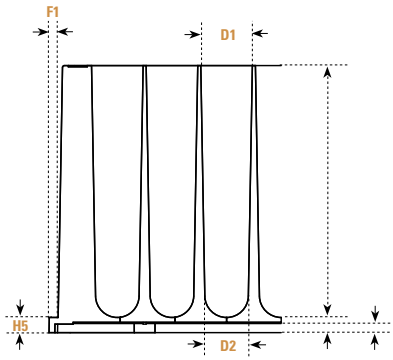


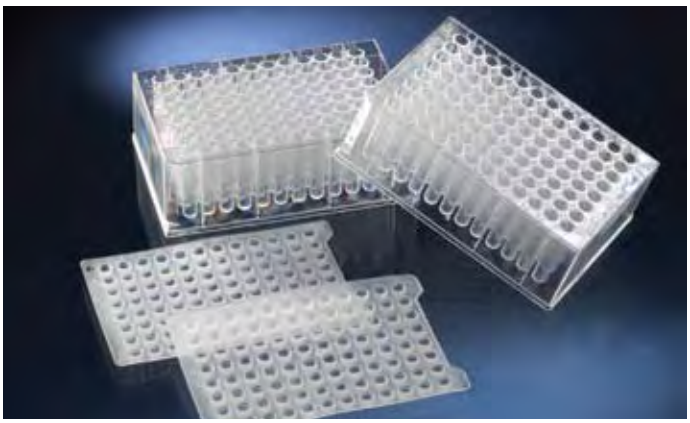
	Plate size	1.3 ml	2.0 ml
		mm	mm
	Total height of plate	**31.6**	**44.0**
H2	Vertical distance from inside well bottom to resting plane	2.5	2.5
H3	Inside depth of well	29.1	41.5
H4	Vertical distance from external well bottom to resting plane	1.4	1.5
H5	Height of flange	-	2.5
D1	Well diameter, top	8.5	8.5
D2	Well diameter, bottom	8.4	6.0
F1	Depth of flange	2.5	1.5

2.0 ml



Cat. No.	Surface	Color	Total vol., ml/well	Sterile	With lid	Units per pack/case
260251	Non-treated	Natural	1.3	Yes	No	5/50
260252	Non-treated	Natural	1.3	No	No	5/50
278743	Non-treated	Natural	2.0	Yes	No	1/60
278752	Non-treated	Natural	2.0	No	No	5/60

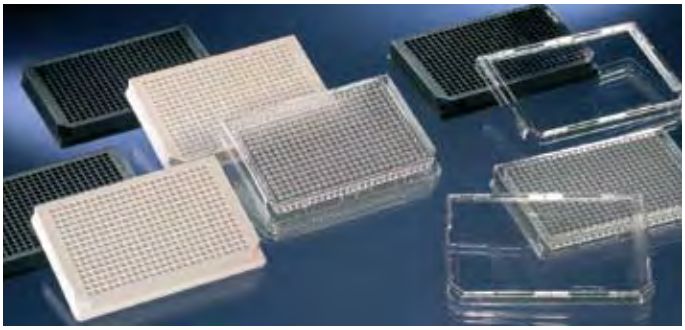
U96 DeepWell Plates 1.0 ml, Polystyrene



- Round bottom wells
- Easy to use with automatic sample handling instruments
- Alpha-numeric grid for quick sample identification
- Ideal for sample collection, storage, combinatorial chemistry and library applications
- Sealable with well caps and sealing tape

Cat. No.	Configuration	Color	Total vol., ml/well	Working vol., ml/well	Sterile	Units per pack/case
278605	Round	Transparent	1.0	0.9	No	4/32
278606	Round	Transparent	1.0	0.9	Yes	4/32

384 Well Plates, Polystyrene

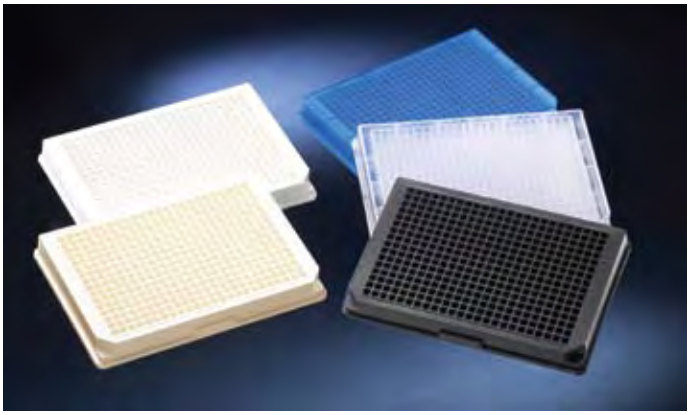


- Cell culture surface available
- Non-treated surface for storage, assays and screening
- Clear plates for colorimetric assays and sample storage
- White plates for luminescence and fluorescence assays
- Black plates for fluorescence assays
- Working volume range: 10-100 µl/well

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
164688*	Cell Culture	Clear	120	Yes	Yes	128 x 86 mm	10/30
164555*	Cell Culture	Clear	120	Yes	No	128 x 86 mm	25/100
164610*	Cell Culture	White	120	Yes	Yes	128 x 86 mm	10/30
164195*	Cell Culture	White	120	Yes	No	128 x 86 mm	25/100
164564*	Cell Culture	Black	120	Yes	Yes	128 x 86 mm	10/30
164571*	Cell Culture	Black	120	Yes	No	128 x 86 mm	25/100
242757	Non-treated	Clear	120	Yes	Yes	128 x 86 mm	10/30
242765	Non-treated	Clear	120	Yes	Yes	128 x 86 mm	1/30
262160	Non-treated	Clear	120	No	No	128 x 86 mm	25/100
242850**‡	Non-treated	Clear	120	Yes	Yes	128 x 86 mm	10/30
265202	Non-treated	Clear	120	Yes	Yes	128 x 86 mm	25/100
265203	Non-treated	Clear	120	Yes	No	128 x 86 mm	25/100
262360	Non-treated	White	120	No	No	128 x 86 mm	25/100
262260	Non-treated	Black	120	No	No	128 x 86 mm	25/100
460440‡	PolySorp	Clear	120	No	No	128 x 86 mm	10/30
460435	PolySorp	Black	120	No	No	128 x 86 mm	10/30
464718*	MaxiSorp	Clear	120	No	No	128 x 86 mm	10/30
460372*	MaxiSorp	White	120	No	No	128 x 86 mm	10/30
460518*	MaxiSorp	Black	120	No	No	128 x 86 mm	10/30
Immobilizer Plates							
436009	Amino	Clear	120	No	No	128 x 86 mm	5/30
436011	Amino	White	120	No	No	128 x 86 mm	5/30
436012	Amino	Black	120	No	No	128 x 86 mm	5/30
436017	Streptavidin	Clear	120	No	No	128 x 86 mm	1/15
436018	Streptavidin	White	120	No	No	128 x 86 mm	1/15
436019	Streptavidin	Black	120	No	No	128 x 86 mm	1/15
436028‡	Nickel-Chelate	Clear	120	No	No	128 x 86 mm	1/15
436029‡	Nickel-Chelate	White	120	No	No	128 x 86 mm	1/15
436031‡	Nickel-Chelate	Black	120	No	No	128 x 86 mm	1/15
436036‡	Glutathione	Clear	120	No	No	128 x 86 mm	1/15
436037‡	Glutathione	White	120	No	No	128 x 86 mm	1/15

‡Not available in Americas
** Certified ** Barcoded on the left short side with code Nunc Elisa 128*

384 Well Plates, Polypropylene



- Low binding surface
- Round bottom wells for optimal sample recovery
- Certified RNase/DNase-free
- Working volume range: 10-100 µl/well

Pinchbar Design

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
264573	Non-treated	Natural	120	No	No	128 x 86 mm	20/120
264574	Non-treated	Natural	120	Yes	No	128 x 86 mm	20/120
264575	Non-treated	White	120	No	No	128 x 86 mm	20/120
264576	Non-treated	Black	120	No	No	128 x 86 mm	20/120
240182	Non-treated	Black	120	Yes	No	128 x 86 mm	20/120
264579	Non-treated	Blue	120	No	No	128 x 86 mm	20/120
264675	Non-treated*	White	120	No	No	128 x 86 mm	20/120

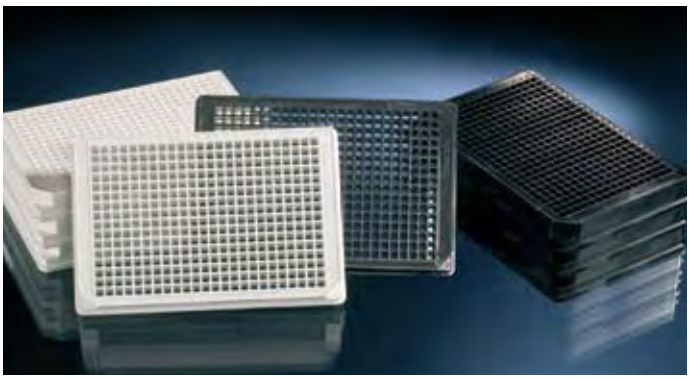
** Low cross talk*

384 DeepWell Plates, Polypropylene

- Excellent for storing DMSO and other strong chemicals and solvents
- Well shape maximizes sample retrieval
- Compatible with robotics and automation
- Rounded square well minimizes wicking (capillary action)
- Working volume range: 5-240 µl/well

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
269390	Non-treated	Natural	252	No	No	128 x 86 mm	5/60

384 Well Optical Bottom Plates, Polystyrene/Polymer Base



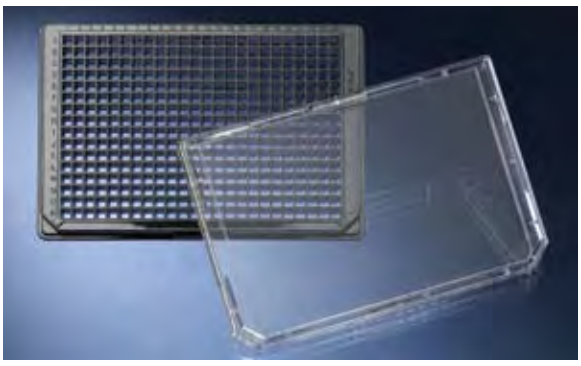
- White or black upper structures with optically clear bottoms
- Can be read from bottom and top, or both
- Optical film made of polystyrene
- Rounded square wells eliminate wicking (capillary action)
- Optimized for scintillation counting
- Cell Culture, Poly-D-Lysine or Collagen I surfaces for cell culture
- Produced in clean environment
- For research use only
- Working volume range: 10-100 µl/well

Pinchbar Design

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
142762*	Cell Culture	White	120	Yes	Yes	128 x 86 mm	10/30
142761*	Cell Culture	Black	120	Yes	Yes	128 x 86 mm	10/30
164730*	Cell Culture	Black	120	Yes	-	128 x 86 mm	10/30
152041	Collagen I	Black	120	No**	Yes	128 x 86 mm	5/20
152029	Poly-D-Lysine	Black	120	No**	Yes	128 x 86 mm	5/20
242763	Non-treated	White	120	No	No	128 x 86 mm	10/30
242764	Non-treated	Black	120	No	No	128 x 86 mm	10/30

** Certified*
***Produced in clean environment*

384 Well Optical Bottom Plates, Polystyrene/Coverglass Base



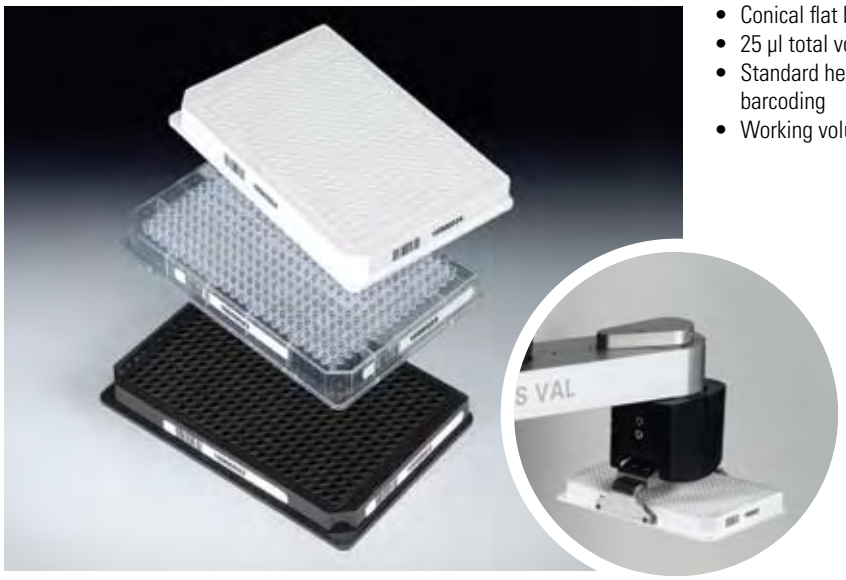
- Black upper structure with coverglass for minimum light scatter and low auto-fluorescence, ensuring accurate results to high signal-to-noise
- Working volume range: 10-100 µl/well

Pinchbar Design

Cat. No.	Surface	Color	Total vol., µl/well	Glass thickness*	Sterile	With lid	Units per pack/case
164586	Cell Culture	Black	120	1.5	Yes	Yes	6/30
240074	Non-treated	Black	120	1.5	No	No	5/30

**No. 1.5 = 0.16-0.19mm*

384 ShallowWell Standard Height Base, Polystyrene

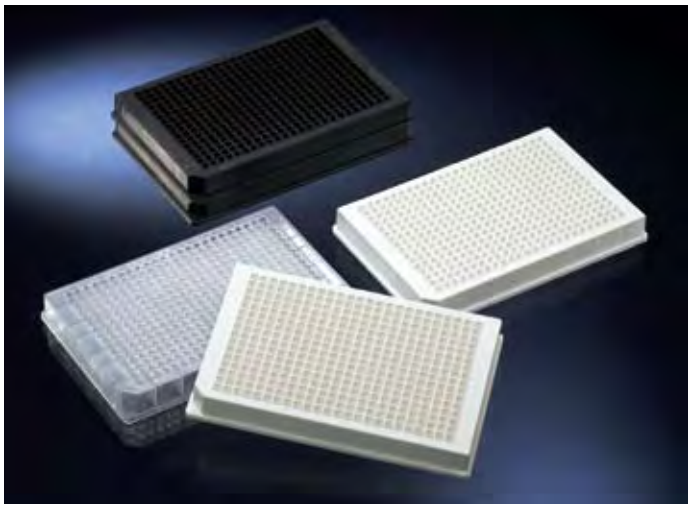


- Conical flat bottom for cell culture or assays
- 25 µl total volume saves reagents
- Standard height provides optimal handling, barcoding
- Working volume range: 2-20 µl/well

Skirted Design

Cat. No.	Surface	Color	Total vol., ml/ well	Sterile	With lid	Units per pack/case
164701	Cell Culture	Clear	25	Yes	Yes	25/100
164702	Cell Culture	Black	25	Yes	Yes	25/100
164703	Cell Culture	White	25	Yes	Yes	25/100
264704	Non-treated	Clear	25	No	No	25/100
264705	Non-treated	Black	25	No	No	25/100
264706	Non-treated	White	25	No	No	25/100

384 ShallowWell Standard Height Base, Polypropylene

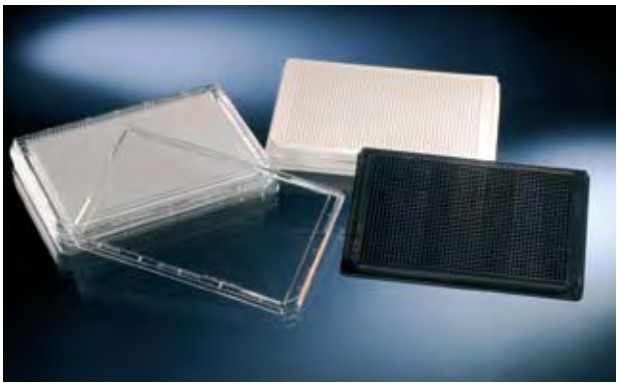


- Small volume applications
- Round bottom wells for optimal sample recovery
- Working volume range: 2-35 µl/well

Skirted Design

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
267459	Non-treated	Natural	58	No	No	128 x 86 mm	25/100
267460	Non-treated	Natural	58	Yes	No	128 x 86 mm	25/100
267461	Non-treated	Black	58	No	No	128 x 86 mm	25/100
267462	Non-treated	White	58	No	No	128 x 86 mm	25/100

1536 Well Plates, Polystyrene

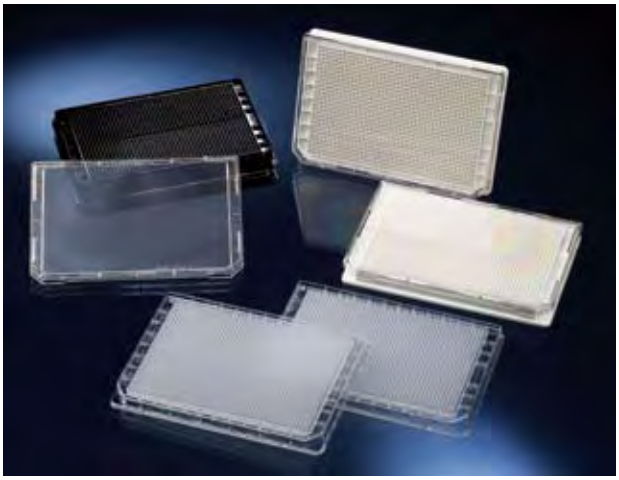


- Low plate height optimized for stacking efficiency
- Working volume range: 1-10 µl/well

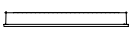
Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
253614	Non-treated	Clear	13.4	No	No	128 x 86 mm	30/90
253607	Non-treated	White	13.4	No	No	128 x 86 mm	30/90
253601	Non-treated	Black	13.4	No	No	128 x 86 mm	30/90
453603*	MaxiSorp	Black	13.4	No	No	128 x 86 mm	30/90

**Certified*

1536 Well High Base Plates, Polystyrene



- Optimal robotic handling
- Preferred skirt design
- Maximum barcode placement area
- Working volume range: 2-10 µl/well



Skirted Design

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
164707	Cell Culture	Clear	13.4	Yes	Yes	128 x 86 mm	25/100
164708	Cell Culture	Black	13.4	Yes	Yes	128 x 86 mm	25/100
164709	Cell Culture	White	13.4	Yes	Yes	128 x 86 mm	25/100
264710	Non-treated	Clear	13.4	No	No	128 x 86 mm	25/100
264711	Non-treated	Black	13.4	No	No	128 x 86 mm	25/100
264712	Non-treated	White	13.4	No	No	128 x 86 mm	25/100

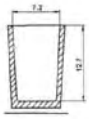
Thermo Scientific Plates Well Guide

Immulon well bottoms:

Volume = 0.33 ml
Area = 2.37cm^2
Flat bottom

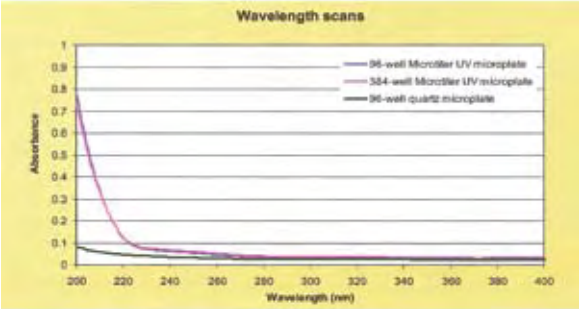
Volume=0.28ml
Area = 1.89cm^2
U-bottom

Universal and enhanced binding well bottom:



Volume = 0.45 ml
Area = 3.24cm^2
Flat bottom

UV Microtiter Microplates



- UV transparent microplates in 96- and 384-well formats
- For DNA and protein quantitation in 260nm and 280 nm
- Low background absorbance
- Temperature range -80°C to +40°C
- Free from DNase, RNase and human DNA, non-pyrogenic

Cat. No.	Description	Bottom	Units per pack/case
8405	96 Well UV Transparent	Flat	40
8505	384 Well UV Transparent	Flat	40

96 Well Immulon Microtiter Solid Microplates

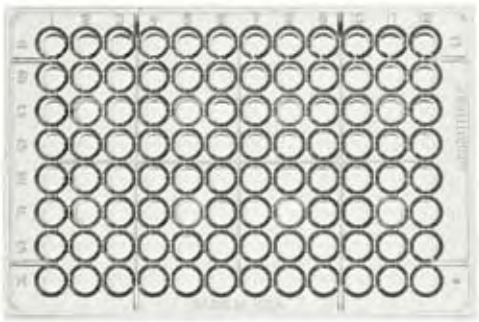
Immulon® 1 B
- Consistent medium binding for hydrophobic complexes and proteins

Immulon 2 B
- High binding surface to provide increased binding of hydrophilic proteins and complexes

Immulon 4 HBX
- Extra-high binding surface with special resin - offers maximum protein uptake
- Well-to-well CV's of plates is certified

Cat. No.	Binding/ Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
F96							
3355	Medium/1B	Clear	330	No	No	128 x 86 mm	50
3455	High/2HB	Clear	330	No	No	128 x 86 mm	50
U96							
3555	Medium/1B	Clear	280	No	No	128 x 86 mm	50
3655	High/2HB	Clear	280	No	No	128 x 86 mm	50
3855	High, Extra/4HBX	Clear	330	No	No	128 x 86 mm	50

96 Well Microtiter Solid Cliniplates

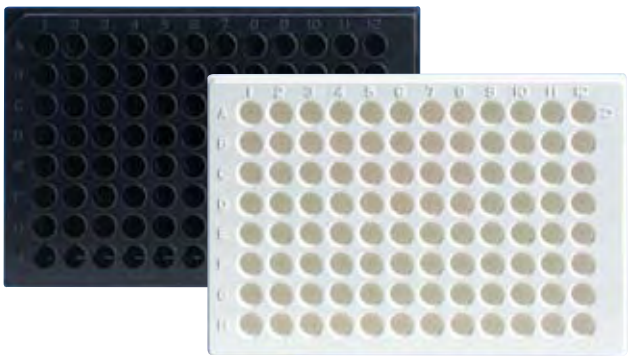


- Universal Binding provides consistent medium binding for hydrophobic complexes and proteins
- White plates are optimal for luminescent assays. Minimal crosstalk and phosphorescent background
- Black plates have low autofluorescence

Cat. No.	Binding	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
F96							
9502227	Universal	Clear	450	No	No	128 x 86 mm	50
95029330	Enhanced	Clear	450	No	No	128 x 86 mm	50
95029780	Universal	Clear	450	Yes	Yes	128 x 86 mm	40
9502887	Universal	White	450	No	No	128 x 86 mm	50
95029770	Universal	White	450	Yes	Yes	128 x 86 mm	40
95029580	Enhanced	White	450	No	No	128 x 86 mm	50
9502867	Universal	Black	450	No	No	128 x 86 mm	50
95029840*	Universal	Black	450	Yes	Yes	128 x 86 mm	40

**Minimum Order: 100 cases*

96 Well Microfluor Solid Microplates



Microfluor 1 White
- Medium binding - offers high signal reflectance and reduced background fluorescence

Microfluor 2 White
- Microplate for assays that require high binding and reduced background for fluorescence assays in the ultraviolet range

Microfluor 1 Black
- Fluorescence vessel with low background

Microfluor 2 Black
- Irradiated Microtiter microplate that provides higher binding and minimal background fluorescence

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
F96							
7605	Microfluor 1	Black	330	No	No	128 x 86 mm	50
7805	Microfluor 2	Black	330	No	No	128 x 86 mm	50
7705	Microfluor 1	White	330	No	No	128 x 86 mm	50
7905	Microfluor 2	White	330	No	No	128 x 86 mm	50
U96							
7005	Microfluor 1	Black	330	No	No	128 x 86 mm	50
7205	Microfluor 2	Black	330	No	No	128 x 86 mm	50
6905	Microfluor 1	White	330	No	No	128 x 86 mm	50
7105	Microfluor 2	White	330	No	No	128 x 86 mm	50

96 Well Microlite+ Solid Microplates

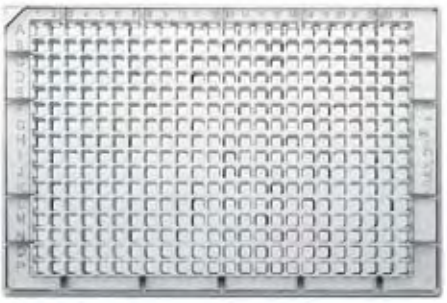
White Universal binding surface
- Low cross talk
- High reflectivity
- Minimum background phosphorescence

Microlite 1+
- Ideal for low signal luminescent reactions, offering medium binding with enhanced dynamic range, extra high reflectivity and minimal cross talk

Microlite 2+
- High binding surface with enhanced dynamic range, extra high reflectivity and minimal cross talk for low signal luminescent reactions

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
F96							
7418	Microlite TCT	White	330	Yes	No	128 x 86 mm	50
7571	Microlite 1+	White	330	No	No	128 x 86 mm	50
7572	Microlite 2+	White	330	No	No	128 x 86 mm	50

384 Well Microtiter Microplates

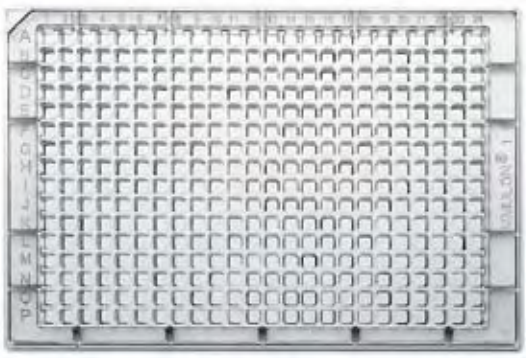


- Ideal for high-throughput screening and research
- Allows miniaturization of assays and other applications including high volume DNA library manipulation and solid phase binding
- Clear plates for colorimetric applications
- White plates for luminometric/fluorometric applications
- Black plates for fluorometric applications
- Standard footprint

Cat. No.	Well Shape	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
Polystyrene Square Well							
95040000	C	Clear	70	No	No	128 x 86 mm	50
95040010	C	White	70	No	No	128 x 86 mm	50
95040020	C	Black	70	No	No	128 x 86 mm	50
95040130	C	Clear	70	Yes	Yes	128 x 86 mm	50
95040230*	C	White	70	Yes	Yes	128 x 86 mm	50
95040330*	C	Black	70	Yes	Yes	128 x 86 mm	50
Polystyrene Square Well							
2205	U	Clear	400	No	No	128 x 86 mm	50
2605	V	Clear	280	No	No	128 x 86 mm	50
9205	F	Clear	330	No	No	128 x 86 mm	50
Vinyl Square Well							
2101	U - alpha numberic	Clear	400	No	No	128 x 86 mm	100
2401	U - unmarked	Clear	400	No	No	128 x 86 mm	100
2601	V	Clear	280	No	No	128 x 86 mm	100
2801	F	Clear	330	No	No	128 x 86 mm	100

**Minimum Order: 100 cases*

384 Well Microtiter Microplates



- For high-throughput screening
- Assay miniaturization
- Standard footprint
- Well shape: rounded square or round
- Flat bottom well
- Well volume 70/120 µl

Cat. No.	Surface	Color	Total vol., µl/well	Sterile	With lid	External dimensions	Units per pack/case
Rounded Square							
8555	Immulon 1B	Clear	120	No	No	128 x 86 mm	50
8755	Immulon 4 HBX	Clear	120	No	No	128 x 86 mm	50
8155	MicroLite 1	White	120	No	No	128 x 86 mm	50
8255	MicroFluor 1	Black	120	No	No	128 x 86 mm	50

96 Well Deep Well Microplates

- High temperature resistance (-196°C to +121°C)
- Autoclavable
- Deep Well plate sealable with storage cap mat

Cat. No.	Description	Color	Total vol., ml/well	Sterile	With lid	External dimensions	Units per pack/case
96V							
95040452	Deep Well Plate	Clear	2.0	No	No	128 x 86 mm	50
95040462	Deep Well Plate	Clear	2.0	Yes	No	128 x 86 mm	50
95040410	Deep Well Plate	Clear	0.5	No	No	128 x 86 mm	50
Accessories for Deep Well Plates							
9503230	Cap Mat	–		No	–	128 x 86 mm	50
9503233	Cap Mat	–		Yes	–	128 x 86 mm	25

Microplate Storage Racks, Plastic

Plastic plate storage racks in colors

- Transport or store up to 50 standard plates or 25 DeepWell plates per rack
- For chest and upright mechanical freezers or incubators
- Sturdy polypropylene and metal construction is lightweight, durable
- Available in four colors to organize your samples
- Locking bar keeps plates secure
- Handle allows convenient transport

Cat. No.	Capacity (plates)	Color	Configuration	Size H x W x D, cm	Height per shelf, cm	Units per case
For standard plates						
344260†	10	Green	10 Tall	23 x 10 x 14	2	1
344261†	10	Purple	10 Tall	23 x 10 x 14	2	1
344262†	10	Red	10 Tall	23 x 10 x 14	2	1
344263†	10	Yellow	10 Tall	23 x 10 x 14	2	1
344280†	50	Green	10 x 5	23 x 51 x 14	2	1
344281†	50	Purple	10 x 5	23 x 51 x 14	2	1
344282†	50	Red	10 x 5	23 x 51 x 14	2	1
344283†	50	Yellow	10 x 5	23 x 51 x 14	2	1
For DeepWell Plates						
344380†	25	Green	5 x 5	25 x 51 x 14	5	1
344381†	25	Purple	5 x 5	25 x 51 x 14	5	1
344382†	25	Red	5 x 5	25 x 51 x 14	5	1
344383†	25	Yellow	5 x 5	25 x 51 x 14	5	1

†Only available in Americas

Microplate Storage Racks, Aluminum

Aluminum racks in colors

- Adjustable shelves to fit any plate or tube rack
- Color coded top and sides for easy identification
- Locking bar keeps plates secure
- For chest and upright mechanical freezers or incubators
- Accommodates:
  18 Low Profile
  10 Standard
  6 DeepWell 1 ml
  5 DeepWell 2 ml

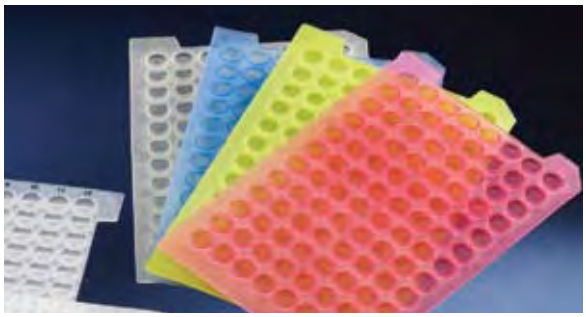
Cat. No.	Color	Configuration	Size H x W x D, cm	Height per shelf, cm	Units per case
367001	Blue	5 - 18 Tall	23.5 x 9.5 x 13.5	Adjustable	1
367002	Natural	5 - 18 Tall	23.5 x 9.5 x 13.5	Adjustable	1

Microplate Storage Racks, Stainless Steel

- Durable stainless steel construction
- Retainer clip on each compartment holds plates securely in place
- Sturdy handles on top and sides for convenient transport
- Label holder for easy identification
- Two convenient horizontal sizes to fit your freezer or refrigerator

Cat. No.	Capacity (plates)	Color	Configuration	Size H x W x D, cm	Height per shelf, cm	Units per case
5039-0048	80 Low Profile 48 Standard 16 DeepWell	Natural	4 Tall x 4 Wide	26.7 x 48.3 x 17.8	5.3	1
5039-0072	120 Low Profile 72 Standard 24 DeepWell	Natural	4 Tall x 6 Wide	26.7 x 63.5 x 17.8	5.3	1

Well Cap Mats



- Protect well contents during short- or long-term storage of chemicals or compounds
- Chemically resistant, pierceable thermoplastic elastomer well caps are excellent for compound storage to -80°C
- Silicone pre-slit well caps permit a pipette tip or probe to enter the well without damage to the cap
- Ethylene-vinyl acetate cap mats effectively seal polystyrene DeepWell plates
- Cat. No. 276011 is pierceable by pipette tips
- 96 well caps for sealing Thermo Scientific Nunc PP plates with shared wall technology

Cat. No.	96 PP*	96 DW	Features	Material	Pierce**	Color	Sterile	Units per pk/case
276000	Yes	Yes	Resists DMSO, ethanol and methanol	Thermo-plastic elastomer	Yes	Natural	Yes	1/50
276002	Yes	Yes	Resists DMSO, ethanol and methanol	Thermo-plastic elastomer	Yes	Natural	No	5/50
276003‡	Yes	Yes	Resists DMSO, ethanol and methanol	Thermo-plastic elastomer	Yes	Yellow	No	5/50
276004‡	Yes	Yes	Resists DMSO, ethanol and methanol	Thermo-plastic elastomer	Yes	Red	No	5/50
276005	Yes	Yes	Resists DMSO, ethanol and methanol	Thermo-plastic elastomer	Yes	Blue	No	5/50
276011	Yes	Yes	Pre-slit; solvent resistant, but avoid 100% DMSO	Silicone	Yes,*** repeatedly	Natural	No	10/50

**Except Cat. No. 442587, 96 Polypropylene Plates*
***Hypodermic needles*
****Also by pipette tips*
‡Not available in Americas

Overview of Nunc Lids

- Clear, strong polystyrene
- Nunc version lids have notches for quick orientation
- Universal version lids can be used with any plates
- Reduces water loss due to lower evaporation
- 96-well lids feature individual condensation rings

Cat. No.	Height without stacking holders, mm	Cut-off Corners	Condensation Rings	Evaporation Barrier*	Height	Color	Sterile	Units per pk/case
Standard Lids, for 96 MicroWell Plates With condensation rings and evaporation rim. Polystyrene. External dimensions 127 x 85 mm								
263339	7.9	Long side	Yes	Yes	Standard	Clear	No	5/100
264122	7.9	Long side	Yes	Yes	Standard	Clear	Yes	1/50
264623	7.9	Long side	Yes	Yes	Standard	Clear	Yes	20/60
Standard Lids for 96 Optical Bottom Plates With condensation rings and evaporation rim. Polystyrene. External dimensions 127 x 85 mm								
255983	7.8	Right short side	Yes	Yes	Standard	Clear	No	20/60
Standard Lids for 384 Well Plates With evaporation rim. Polystyrene. External dimensions 127 x 85 mm								
264611	7.9	Long side	No	Yes	Standard	Clear	Yes	1/60
264612	7.9	Long side	No	Yes	Standard	Clear	No	20/180
264616	7.9	Long side	No	Yes	Standard	Clear	Yes	20/180
White Lid, for 384 and 1536 Well Plates and OmniTrays Polystyrene. External dimensions 127 x 85 mm								
448143	7.9	Long side	No	No	Standard	White	No	20/120
Universal Lid for 384 and 1536 Well Plates With side cut-out and evaporation rim. Polystyrene. External dimensions 127 x 85 mm								
250002	8.34	No	No	No	Standard	Clear	Yes	20/60
250003	8.34	No	No	No	Standard	Clear	No	20/60
250005	8.34	No	No	No	Standard	Clear	No	20/180
LowBot Lids, Universal Version for 384 and 1536 Well Plates With condensation rings and evaporation rim. Polystyrene. External dimensions 127 x 85 mm								
253623	4.6	No	No	Yes	Low Profile	Clear	No	25/100
253624	4.6	No	No	Yes	Low Profile	Clear	Yes	25/100

** Evaporation barrier is a rim around the inside edge of the lid*

Thermo Scientific Nunc Lids

Cat. No.	96 Solid MicroWell* PS, PP	96 Optical Bottom	384 Standard Height, 384 ShallowWell PS, Standard Height, 1536 High Base	384 ShallowWell Low Profile, 1536 Low Profile	96 DeepWell (278605 and 278606), 384 ShallowWell PP
Standard Lids for 96 MicroWell Plates					
263339	Yes	No	No	No	No
264122	Yes	No	No	No	No
264622	Yes	No	No	No	No
264623	Yes	No	No	No	No
264626	Yes	No	No	No	No
Standard Lids for 96 Optical Bottom Plates and Silent Screen Plates					
255983	No	Yes	No	No	No
Standard Lids for 384 and 1536 Well Plates					
264611	Yes	No	Yes	No	No
264612	Yes	No	Yes	No	No
264616	Yes	No	Yes	No	No
White Lid for 384 and 1536 Well Plates and OmniTrays					
448143	Yes	No	Yes	No	No
Standard Lids, Universal Version for Standard Height 384 and 1536 Well Plates					
250002	Yes	Yes	Yes	No	Yes
250003	Yes	Yes	Yes	No	Yes
250005	Yes	Yes	Yes	No	Yes
LowBot Lids, Universal Version for 384 and 1536 Well Plates					
253623	Yes	Yes	Yes	Yes	Yes
253624	Yes	Yes	Yes	Yes	Yes

** Not 1 ml DeepWell PP (278605 and 278606)*

Thermo Scientific Plate Accessories

- To keep samples free from contamination during liquid handling, assays, tests and reactions, four different polystyrene lids can be provided for Thermo Scientific Microplates

Temperature range for plate sealers:
- Acetate: -32°C to 93°C
- Mylar (PET): -46°C to 135°C
- PVC: -30°C to 80°C

Cat. No.	Description	Sterile	Units per case
Accessories			
5500[1]	Universal PS Lid	Yes	50/100
5550[1]	Universal PS Lid	Yes	1/50
9503210[2]	Microplate Lid, 96 W	No	15/15
9503220[2]	Microplate Lid	No	15/15
6305	Vinyl Lid for 1 x 12 Strip Assembly	No	25/100
5701	Mylar Plate Sealers	No	100/100
3501	Acetate Plate Sealers	No	100/100
9503130	PVC Sealing Tape	No	100/100
6604[1]	Holder for 1 x 12 Strip Assembly	No	10/10
9503060[2]	Multiframe	No	5/5
9503110[2]	Strip Removal Tool	No	25/25
9503140	Microplate Sample Rack	No	1/1

[1]Accessories for 4-digit products
[2]Accessories for ex-Labsystems products

Sealing Tapes

- Effectively seal all microplate formats
- For storage, PCR, microscopy, culture, protection
- Protective backing
- Pre-cut, plate-sized sheets
- Pierceable tapes are available

Cat. No.	Description	Material	Adhesive	Color	Sterile	Pierce	Certified RNase/ DNase-free	Temp. Range, °C	Units per pk/case
276014	General use, PCR, storage, photo-sensitive samples	Aluminum	Silicone	Silver	No	Yes	Yes	-80 to +120	100/100
232698	PCR and storage in 96 well plates	Aluminum	Acrylate	Silver	No	Yes	Yes	-80 to +150	100/100
232699	PCR and storage in 96 well plates	Aluminum	Acrylate	Silver	No	Yes	Yes	-80 to +150	100/100
236370†	General purpose seal and sample protection	Polyester	Silicone	Clear	No	No	No	-70 to +100	100/100
236269‡	Slightly stiffer than polyolefin tape, general purpose	Polyester	Acrylic	Clear	No	No	No	-20 to +100	200/800
236272	Opaque, white seal, luminescent assays	Polyester	Acrylate	White	Yes	No	No	-40 to +80	50/50
236366	Cell Culture, sterile applications	Polyester	Acrylic	Clear	Yes	No	No	-70 to +100	200/800
236707	Convenient roll dispenser, general use tape	Polyester	Acrylic	Clear	No	No	No	-20 to +100	1000/1000
235306	Repeat piercing, non sticky, low fluorescence, storage	Polyethyl-ene	Silicone	Clear	No	Yes	No	-70 to +100	100/100
232701	Microscopy, good optics, low auto-fluorescence, DMSO compatible	Polyolefin	Acrylate	Clear	No	No	No	-70 to +100	100/100
232702	PCR, fluorescence assays, microscopy	Polyolefin	Acrylate	Clear	No	No	Yes	-70 to +100	100/100
235307	Best optics, microscopy, lowest fluorescence, Q-PCR	Polyolefin	Silicone	Clear	No	No	No	-70 to +100	100/100
236710	Convenient roll dispenser, DSMO compatible, low auto-fluorescence	Polyolefin	Acrylate	Clear	No	No	No	-70 to +100	400/400
236702	Black alpha numeric guide on 96 well plate bottom label	Polypropyl-ene	Acrylate	Clear	No	No	No	N/A	100/100
249720	Breathable	Rayon	Acrylate	White	No	Yes	No	-20 to +80	50/50
241205	Breathable, cell culture	Rayon	Acrylate	White	Yes	Yes	No	-20 to +80	25/50
236703	Apply to plate top or bottom, protect light sensitive samples	Vinyl	Acrylate	Black	No	No	No	-40 to +80	50/50
236701	Repeat piercing, pre-cut "X" self closes, short term storage	Vinyl	Acrylate	Clear	No	Yes	No	-40 to +80	100/100

†Only available in Americas
‡Not available in Americas

Tape 8, Tape 12 and Tape 48

- Clear, pierceable polyester strips
- -20°C to 100°C

Cat. No.	Description	Color	Sterile	Units per pack/case
232689	Seal one row of a 96 MicroWell Plate	Clear	No	100/400
232700	Seal four rows of a 96 MicroWell Plate	Clear	No	100/400

Tape Applicator

Cat. No.	Description	Color	Sterile	Units per pack/case
250050	Rectangular, hand held, promotes consistent seal	Gold	No	2/2

Thermo Scientific Nunc-Immuno Washers

- Easy-to-use
- Allow for a flexible washing procedure
- Uniform and efficient washing
- Very robust and reliable
- Rack included
- Adjustable to all well shapes
- Autoclavable at 121°C
- No electrical connections

Cat. No.	Description	Units per pack/case
470174	Nunc-Immuno™ Wash 8	1/1
470175	Nunc-Immuno Wash 12	1/1
Accessories		
554569‡	Tubing Kit for Nunc-Immuno Washers - contains: 5 ml silicone tubing (10 mm diameter, 6 mm bore), 1m silicone tubing (5 mm diameter, 3 mm bore), 3 clamps, 1 Y connector	1/1
455493‡	Spare Part Kit - contains: 5 different O-rings, 1 spring	1/1

The Nunc-Immuno Wash is available in 8 and 12 channel versions to fit 96 well Immuno plate or module format. Adjustable to all well shapes. The 8 channel version is not suitable for BreakApart modules.
‡Not available in Americas

Barcode Scanners

- Plug and Play scanner for use with USB slot
- The scanners automatically switch between Code 128, Code 39, Interleaved 2 of 5 and several other barcodes
- Durable and low-cost
- Contact scanner (must be touching the barcode to read)

Cat. No.	Description	Units per case
330040‡	Scanner for keyboard slot	1/1
330050	Scanner for USB	1/1

‡Not available in Americas

Thermo Scientific Multiskan Microplate Readers

Our Multiskan® microplate readers make a great match with Thermo Scientific and Thermo Scientific Nunc microplates.

The new Multiskan FC microplate photometer is designed for reliability and ease of use with ELISA or any other photometric application both in research and routine laboratories. Thermo Scientific Varioskan Flash spectral scanning multimode reader offers ultimate performance and versatility for academic, pharma and biotech research.

Multiskan FC microplate photometer
- Wide wavelength range of 340 – 800 nm
- Fast reading with 96- or 384-well clear plates
- Ease-of-use with ready-made protocols
- Proven performance through patented design and self-diagnostics

Varioskan® Flash Spectral Scanning Multimode Reader
- Unlimited wavelength selection with spectral scanning
- Fluorescence intensity, photometric, luminometric and TRF applications enhanced with the right choice of microplates
- Superior usability and visual workflow with Thermo Scientific SkanIt® Software

Instrument	Microplate instrument type	Plate type	No. of wells
Multiskan FC	Microplate photometer	Clear	96, 384
Multiskan Spectrum	Microplate spectrophotometer	Clear	6, 12, 24, 48, 96, 384
Fluoroskan Ascent	Microplate fluorometer	Black, clear bottom black	6, 12, 24, 48, 96, 384
Fluoroskan Ascent FL	Microplate fluorometer and luminometer	Black and white	6, 12, 24, 48, 96, 384
Luminoskan Ascent	Microplate luminometer	White, clear bottom white	6, 12, 24, 48, 96, 384
Varioskan Flash	Spectral scanning multimode reader: photometry, fluorescence intensity, TRF, luminometry	All, clear bottom black and white	6, 12, 24, 48, 96, 384, 1536
Appliskan	Filter based multimode reader: photometry, fluorescence intensity, TRF, luminometry, FP	All, clear bottom black and white	6, 12, 24, 48, 96, 384
Multidrop	Reagent dispensers	All	96, 384, 1536
Wellwash	Microplate washers	All	96
iEMS Incubator/ Shaker	Microplate incubator and shaker	All	96

For more information about Thermo Scientific microplate readers, visit www.thermo.com/readingroom.
For more information about Thermo Scientific microplate instruments, visit www.thermo.com/mpi.

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