

Product selection guide for every step of your cell culture workflow

From culture to discovery

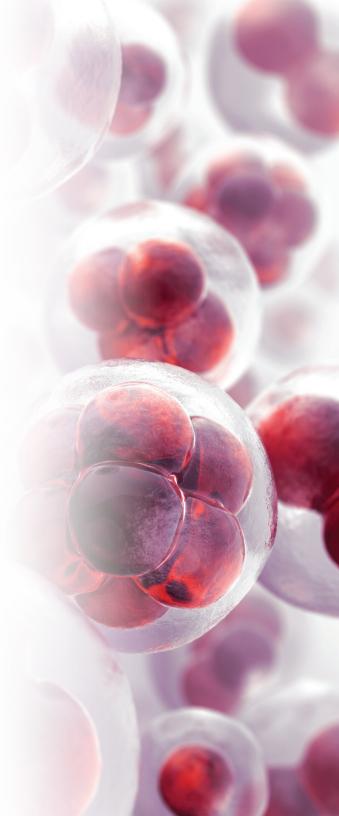


Culture with confidence

Thermo Scientific[™] Nunc[™] and Nalgene[™] cell culture products have been used by researchers for more than 60 years in labs around the world.

We take pride in supplying products with consistent high quality to help ensure you get the most reproducible and reliable results in your research. Our products are manufactured using only high-quality raw materials that comply with USP Class VI testing. Most of our cell culture products are tested with trusted Gibco[™] media to confirm optimal cell growth across multiple cell lines. This selection guide will help you find the most relevant cell culture surface and format for every step of your workflow—from culture to discovery.

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Surfaces

Choosing the best growth surface for your cells

To help ensure optimal results for different cell types, we offer a range of Thermo Scientific[™] cell culture surfaces. Let us help guide your selection to choose the culture surface for your applications.

Nunclon[™] Delta surface for adherent cells

A standard tissue culture (TC) surface modification that makes the polystyrene surface more hydrophilic, thus facilitating maximum adhesion for a broad range of cell types.

Nunc[™] poly-D-lysine or collagen I–coated surface, and Lab-Tek[™] II CC^{2™}modified glass surface for primary cells and sensitive cells

The extracellular matrix (ECM)-coated surfaces imitate the growth environment of cells inside a living body—ideal for cells that don't grow well on the regular TC surface. Collagen I is of animal origin, whereas Nunc poly-D-lysine is fully synthetic. The CC² glass surface mimics poly-D-lysine surface properties, but without the coating material.

Nunc[™] UpCell[™] surface for adherent cultures that require enzyme-free cell detachment

Enables harvesting of cells in single-cell suspensions or as contiguous cell sheets by temperature reduction to preserve cell membranes and membrane molecules, and helps create 3D tissue models without artificial scaffold material.

Nunc[™] non-treated surface for suspension culture

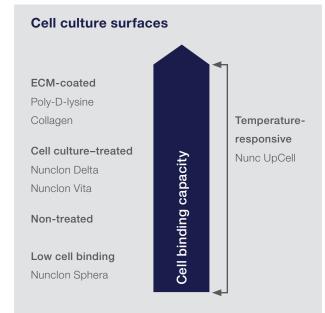
High-quality, optically clear virgin polystyrene with a hydrophobic surface is ideal for suspension cell culture, and also useful for a variety of biochemical assays.

Nunclon[™] Sphera[™] surface for spheroid-organoid culture

Using this surface, cells grow and aggregate with virtually no attachment to the culture vessel; suitable for spheroid culture, organoid culture, and 3D culture.

Custom coating

If you have any specific need in your research, we can coat cell culture surfaces according to a custom protocol. Contact our technical sales specialists for more information.



Custom coatings available on request

Flasks

Nunc cell culture flasks-designed for the way you work

Thermo Scientific[™] cell culture flasks are designed for culture consistency, cell health, and reproducibility. Select the surface and ancillary options you're looking for in a tissue culture flask from our comprehensive portfolio. Choose from a variety of surfaces and sizes with culture areas ranging from 25 cm² to 500 cm² to suit your specific applications and cell types.

Nunc[™] EasYFlask[™] flasks

Designed for convenience

- Angled, extra-wide neck provides easier access to growth surface with cell scrapers or pipettes
- Ergonomic design with 1/3-turn cap enables one-handed operation and avoids wrist strain
- Molded and printed graduations help enable easy and quick measurement of growth media

Nunc[™] standard flasks

Designed with a straight neck and barcoding option for automation cell culture

Nunc[™] T300 flasks

Designed for durability and ease of use

- One-piece design with straight neck and grip notches
- Largest single-layer, cell culture-treated flask on the market
- Prominent stacking feet on upper surface enable reliable stacking of multiple flasks in incubators and culture hoods

Nunc[™] TripleFlask[™] flasks

Designed for cell culture expansion without expanding footprint of the flask

- 3-layer flask providing 3 times the growth surface of a T175 flask for the same footprint, saving space in the incubator
- Barcoding option for automation cell culture







Nunc standard flasks

Nunc T300 flasks



Nunc TripleFlask flasks

Table 1. Nunc flasks.

								Cat. No. by surface			
Flask type	Surface area (cm²)	Working volume (mL)	Neck style	Cap type	Barcoding	Nunclon Delta for adherent cells	Non-treated for suspension cells	Nunclon Sphera for spheroid-organoid culture	Poly-D-lysine for primary and sensitive cells	Collagen I for primary and sensitive cells	
	25	7		Filtered		156367	169900	174951	132703*	132706*	
	20			Solid		156340					
	75	25		Filtered		156499	156800	174952	132704*	132707*	
EasYFlask	75	20	Angled	Solid		156472					
EasyFlask	175		Angled	Filtered		159910	159926		132705*	132708*	
	175	55		Solid		159920					
	225	70		Filtered		159934					
				Solid		159933					
	05	7	7	Areadaad	Filtered		136196				
	25		Angled	Solid		163371					
	00	30		Filtered		178905					
Standard flask	80			Solid		153732					
			Straight	Filtered		178883					
	175	68		Filtered	•	178983					
				Solid		156502					
TOOD flaat	000	450	Otherintet	Filtered		132098					
T300 flask	300	150	Straight	Solid		132097					
				Filtered		132913	132903				
TripleFlask	500	200	Straight	Filtered	•	132920					
				Solid		132867					

* Aseptically sterile.

Find out more about Nunc cell culture flasks at thermofisher.com/cellcultureflasks

Dishes and multidishes

Nunc cell culture dishes and multidishes—a better way to handle your cells

Thermo Scientific[™] Nunc[™] cell culture dishes are available in a wide selection of formats, materials, and surface modifications. Each is designed and produced under the highest quality standards to promote healthy cells and reproducible results. Each selection offers excellent optical quality for manual and automated imaging and is compatible with automated equipment and instruments.

Nunc[™] EasYDish[™] dishes

- Designed to improve handling, stacking, and transporting of cell cultures in the lab
- Beveled grip makes it easier to grasp and manage dish with gloved hand
- Raised outer edge on the lid helps keep stacked dishes stable

Nunc[™] standard dishes

- Available in round, rectangular, and square formats
- Available with or without air vent

Nunc[™] glass bottom dishes

- Combines the convenience of a standard 35 mm dish with the imaging benefits of coverglass to provide optimum optical characteristics required for high-magnification microscopy and confocal imaging
- Cell culture-treated glass to enhance cell attachment and growth

Nunc[™] multidishes

- Designed to prevent evaporation and cross-contamination with one-way lid orientation and rings in lid over each well
- Available with round or rectangular wells



Nunc EasYDish dishes



Nunc standard dishes



Nunc glass bottom dishes



Table 2. Nunc dishes and multidishes.

						Cat. No. by surf	ace	
Dish type		Surface area (cm²)	Air vent	Nunclon Delta for adherent cells	Non-treated for suspension cells	Nunclon Sphera for spheroid-organoid culture	UpCell for adherent culture plus trypsin-free cell harvesting	Cell culture-treated glass for high-quality imaging
	35 x 10	8.8	•	150460				
	60 x 15	21.5	•	150462				
Round EasYDish	100 x 15	56.7	•	150464				
	100 x 20	56.7	•	150466				
	150 x 20	145	•	150468				
	05 x 10	0.0		150318				
	35 x 10	8.8	•	153066	171099	174943	174904	150680, 150682
	60 x 15	21.5		150326				
Round standard dish	00 x 15	21.0	٠	150288	150340	174944	174903	
CIGIT	100 x 15	- 56.7	•	150350		174945	174902	
	100 x 20	00.7	٠	172931				
	150 x 20	145	•	168381				
Rectangular dish	128 x 86	84		165218	242811			
Square dish	245 x 245	500		166508	240835			

					Cat. No. by surface						
Multidish type	Well shape	Surface area/well (cm²)	Large packaging	Nunclon Delta for adherent cells	Non-treated for suspension cells	Nunclon Sphera for spheroid-organoid culture	UpCell for adherent culture plus trypsin-free cell harvesting	Poly-D-lysine– coated for sensitive cells	Collagen I– coated for sensitive cells		
4	Round	1.9		176740	179820						
4-well	Rectangle	21.8		167063	267061						
0	David	9.6	ound 9.6		140675	150239	174932	174901	152035**	152034**	
6-well	Round			•	140685						
8-well	Rectangle	10.5		167064							
12-well	Round	3.5		150628	150200	174931	174900				
0.4	David	10		142475	144530	174930	174899	152025**			
24-well	Round	1.9	•	142485							
40	David			150687	150787		174898				
48-well	Round	1.1	•	152640							

** Aseptically sterile.

Find out more about Nunc cell culture dishes at **thermofisher.com/cellculturedishes** Find out more about Nunc cell culture multidishes at **thermofisher.com/cellcultureplates**

Microplates

Nunc microplates—designed for your specific application needs

Whether you're culturing individual cell lines or scaling up for high-throughput screening, or anything in between, there is a Thermo Scientific[™] Nunc[™] microplate for your needs. Advances in manufacturing for surface technology, well geometry, and optical flatness mean we have a plate tailored for your specific application.

Nunc[™] Edge 2.0 plates

• Designed to eliminate evaporation and improve cell growth consistency across the 96 wells with a built-in reservoir surrounding the wells that can be filled with medium or gel

Nunc[™] standard plates

- Available in clear, black, and white to suit different detection technologies used by plate readers
- Available with 96, 384, and 1,536 wells for high-throughput screening (HTS) applications

Nunc[™] optical bottom plates

• With superior imaging quality, and minimal background noise and crosstalk between wells, these plates are optimized for fluorescence and luminescence imaging applications







Nunc standard plates



Nunc optical bottom plates

Table 3. Nunc microplates.

									Cat. No. by surface			
Microplate type	Bottom	Well shape	Color		Large packaging	Nunclon Delta for adherent cells	Non-treated for suspension cells	Nunclon Sphera for spheroid-organoid culture	UpCell for adherent culture plus trypsin- free cell harvesting	Poly-D-lysine for primary and sensitive cells	Collagen I for primary and sensitive cells	CC ² glass for primary and sensitive cells
						168055						
	Solid	Flat (F)	Clear	•		167008		174927	174897	152039 ⁺	152038 [†]	
	30110	FIAL (F)	Glear		•	156545						
				•	•	161093	260860					
	Solid with reservoirs	Flat (F)	Clear	•		167425	267427					
	(Edge plate)	riat (r)		•	•	167542	267544					
			White	٠		136101	236105					
		Flat (F)		•	•	136102	236107					
			Black	٠		137101	237105					
			DIACK	•	•	137103	237107					
						143761	262162					
96-well	Solid	Round (U)	Clear	•		163320		174925				
				•	•	168136	268200	174929				
							249662					
	Conical (V)	Capical () ()	Clear		•		249940					
		Conical (V)	Clear	•			277143					
				•	•		249952					
	Optical coverglass Flat		White	•		164590						
		Flat (F)	Black	•		164588	265300 [±]					160376
			14/1-14-	•		165306				152028+	152040†	
			White				265302 [±]					
	Optical polymer film	Flat (F)	Black	•		165305				152037*	152036†	
							265301 [±]					
			01	•		164688	265202					
			Clear				265203					
			14/1-11	•		164610						
	Solid	Flat (F)	White			165195	262360 [±]					
			Disala	•		164564						
			Black				262260 [±]					
384-well			Clear				264704 [±]					
	Solid shallow-well	Flat (F)	White				264706 [‡]					
			Black				264705 [±]					
	Optical coverglass	Flat (F)	Black	•		164586						
			White	•		142762						
	Optical polymer film	Flat (F)		•		142761				152029 ⁺	152041†	
			Black				242764 [±]					
			Clear				253614 [±]					
1,536-well	Solid	Flat (F)	White				253607‡					
		, í	Black		1		253601 [±]					

+ Aseptically sterile.

‡ Non-sterile.

For barcoding the plate, go to **thermofisher.com/barcodeconfigurator** Find out more about Nunc cell culture plates at **thermofisher.com/cellcultureplates**

Chamber slides and coverglasses

Nunc chamber slides and chambered coverglasses superior cell imaging performance simplified

Efficiency is everything. The Thermo Scientific[™] Nunc[™] Lab-Tek[™] and Lab-Tek[™] II chamber slide system and chambered coverglasses simplify your cell imaging workflow by allowing you to culture, modify, stain, and analyze—all in a single device.

Nunc chamber slides

• Chamber slides are designed for growth, fixation, staining, and microscopic examination of cultured cells on a single surface with removable medium chambers

Nunc chambered coverglasses

• Chambered coverglasses with lids are intended for high-magnification live imaging of cells using an inverted microscope

Nunc[™] Lab-Tek[™] flasks on slides

• Ideal for cell karyotyping using single-cell autoradiography or single-cell immunofluorescence



Nunc chamber slides



Nunc chambered coverglasses



Nunc Lab-Tek flasks on slides

Table 4. Nunc chamber slides and chambered coverglasses.

					Cat. No. by slide material		
Chamber slide type	Number of wells	Surface area/well (cm²)	Chamber-removable	Sealant	Glass	Permanox [™] slides	CC ² glass
	1	9.4			177372	177410	
Lab-Tek	2	4.2		Silicone, medical grade	177380	177429	
	4	1.8	Yes, no tool needed		177399	177437	
	8	0.8			177402	177445	
	16	0.4			178599		
	1	8.6			154453		154739
	2	4.0		Biocompatible acrylic	154461		154852
Lab-Tek II	4	1.7	Yes, tool provided	adhesive	154526		154917
	8	0.7			154534		154941

Chambered coverglass type	Number of wells	Surface area/well (cm²)	Chamber-removable	Borosilicate coverglass thickness (mm)	Cat. No. by coverglass thickness
	1	9.4			155361
Lab-Tek	2	4.2	Nie	0.10, 0.17	155380
	4	1.8	No	0.13–0.17	155383
	8	0.8			155411
	1	8.6			155360
	2	4.0	Nie		155379
Lab-Tek II	4	1.7	No	0.16–0.19	155382
	8	0.7			155409

				Cat. No. by slide material	
Flask on slide type	Number of wells	Surface area/well (cm²)	Suggested working volume (mL)	Glass	TC-treated polystyrene
SlideFlask	1	9.0	2.5–5		170920
Flaskette	1	10.0	2.5–5	177453	

Find out more about Nunc chamber slides and chambered coverglasses at thermofisher.com/chamberslides

Cell culture inserts

Nunc cell culture inserts and carrier plate systems—versatility and convenience for your permeable cell culture applications

When your cell-based research calls for more than the standard culture vessel, the porous membranebased Thermo Scientific[™] Nunc[™] cell culture inserts enable the versatility you need by allowing the attached cells to be exposed to different conditions on the apical and basal sides, as well as allowing molecules and cells to migrate, diffuse, or be actively transported across the growth surface. The unique Thermo Scientific[™] Nunc[™] carrier plate systems simplify procedures that require an air–liquid interface and change of medium by allowing the inserts to be hung in three precise positions in the wells.

Nunc cell culture inserts

- Polycarbonate (PC) inserts have high pore density to allow more exchange of growth medium through the membrane for transport studies and co-culture
- PC porous membrane material is optimized for cell growth and are well suited for barrier assays, and tumor migration and invasion studies

Nunc carrier plate systems

- Ability to adjust the hanging height of inserts in the multiwell plate—optimized for culture at the air–liquid interface with precise position control
- Extends cell feeding interval of air-liquid interface culture by putting more medium in each well with the insert at the highest hanging position
- Ability to lift all the inserts from the multiwell plate at once, saving time when changing medium



Cross-section view of a Nunc carrier plate system



Nunc cell culture inserts



Nunc carrier plate system

Table 5. Choose insert pore size by application.

		Insert pore size			
Cell culture applicat	ions	0.4 µm	3 µm	8 µm	
	Molecules including hormones and growth factors				
Transport studies	Drug transport across epithelial (e.g., Caco-2) and endothelial barriers	•	•		
	Drug transport across brain microvascular endothelial cells				
	Cell-cell interactions	_			
Co-culture studies	Cell-substrate interactions		•		
Tiaqua anginaaring	Angiogenesis				
Tissue engineering	Dermal or epidermal and epithelial tissue models		•		
Chemotaxis studies	Migration of cells including eosinophils and macrophages		•	•	
	Tumor invasion and metastasis models				
Invasion studies	Invasion inhibitors		•	•	
	Extracellular matrix effects				

Table 6. Nunc cell culture inserts and carrier plate systems.

					Cat. No. by membrane pore size			
Membrane	Plate	Inserts/plate	Surface area/insert (cm²)	Carrier plate	0.4 µm	3 µm	8 µm	
	24-well	12	0.5		140620	140627	140629	
	24-Well	24	0.5	•	141002	141004	141006	
Delveerbanete	12-well	12	1.1		140652	140654	140656	
Polycarbonate	12-weii			•	141078	141080	141082	
	6-well	6	3.1		140640	140642	140644	
	0-WAII		4.1		140660	140663	140668	

Find out more about Nunc cell culture inserts and carrier plate systems at thermofisher.com/cellcultureinserts

Shaker flasks

Nalgene shaker flasks—your choice for optimal scale-up

Save preparation time and avoid contamination risk with sterile Thermo Scientific[™] Nalgene[™] single-use PETG Erlenmeyer flasks—ideal for suspension cell culture, medium preparation, mixing, and storage.

Key features

- Made with crystal clear, break-resistant, bisphenol A (BPA)-free PETG
- Sterile with 10⁻⁶ sterility assurance level (SAL)
- Made for single use to reduce cross-contamination and eliminate need for cleaning
- Collapse when autoclaved-reducing biohazardous waste volume
- Graduated for quick volume assessment
- Validation binder available upon request to help jump-start your validation process
- Options of solid or filtered cap for adequate gas exchange
- Plain or baffled bottom to suit needs for reducing shear stress or improving aeration



Bottom style Volume (mL) Cap type Cat. No. 4115-0125 Filtered 125 Solid 4112-0125 4115-0250 Filtered 250 Solid 4112-0250 Filtered 4115-0500 500 Solid 4112-0500 Plain Filtered 4115-1000 1.000 Solid 4112-1000 Filtered 4115-2000 2,000 Solid 4112-2000 Filtered 4115-2800 2.800 Solid 4112-2800 Filtered 4116-0125 125 Solid 4113-0125 4116-0250 Filtered 250 Solid 4113-0250 Filtered 4116-0500 500 Solid 4113-0500 Baffled Filtered 4116-1000 1,000 Solid 4113-1000 Filtered 4116-2000 2,000 Solid 4113-2000 4116-2800 Filtered 2.800 Solid 4113-2800

Table 7. Nalgene single-use PETG Erlenmeyer flasks.

Accessories

Nunc cell culture accessories—aid your research with simplicity

Complementing the essential cell culture devices, Thermo Scientific[™] cell culture accessories bring convenience and compatibility to every step of your cell culture workflow.

Nunc[™] conical tubes—a clear advantage in sample processing and tracking

- Nunc[™] EZFlip[™] conical tubes with proprietary hinged-cap design can be opened and closed with one hand
- Nunc standard conical tubes are available with environment-friendly and recyclable plastic rack

Nunc[™] Shortie pipettes with ergonomically friendly design are suitable for use

• Nunc[™] regular pipettes are the only pipettes compatible with Sartorius

• Wide range of packaging options to suit your recycling needs and reduce

Table 8. Nunc conical tubes.

			Cat. No. by packaging		
Tube type	Volume (mL)	Max RCF⁵ (x <i>g</i>)	Loose	Racked	
	15	10,500	339650	339651	
Standard conical	50	17,000	339652	339653	
EZFlip conical	15	8,500	362694	362695	
	50	9,500	362696	362697	

[®]Relative centrifugal force (RCF) is determined by centrifuge model, rotor–adapter combination, and centrifugation conditions (e.g., temperature, time, acceleration, deceleration, sample volume, etc.)

Table 9. Nunc serological pipettes.

				Cat. No. by packaging	J
Volume (mL)	Color code	Shortie	Individual (paper and plastic)	Individual (plastic)	Bulk
1			170353	170364	170371
2			170354	170365	170372
5			170355	170366	170373
5		٠	170360		
10			170356	170367	170374
10		٠	170361		
25			170357	170368	170375
50			170358	170369	170376

Table 10. Nunc cell scrapers.

	Cat. No. by packaging		
Length (cm)	50/case	250/case	
23	179693PK	179693	
32	179707PK	179707	

impact on the environment

SelecT[™] automated cell culture systems

in laminar hood

Nunc[™] cell scrapers-ultimate flexibility

- Individually wrapped, with flexible blade for optimal removal of cells
- Provide an alternative solution to cell dissociation enzymes

Nunc[™] serological pipettes—accuracy at every stage

Table 11. Nunc key products.

Category	Description	Type or packaging	Cat. No.
Nunc EasYDish CellNunc EasYDish Dish, Nunclon Delta certifiedCulture Dishes	Nunc EasYDish Dish, Nunclon Delta certified	35 mm diameter x 13 mm high, 8.8 cm² culture area	150460
	60 mm diameter x 16 mm high, 21.5 cm ² culture area	150462	
		100 mm diameter x 17 mm high, 56.7 cm ² culture area	150464
		100 mm diameter x 21 mm high, 56.7 cm ² culture area	150466
		150 mm diameter x 21 mm high, 145 cm ² culture area	150468
Nunc EasYFlasks Nunc EasYFlask, Nunclon Delta certified	Nunc EasYFlask, Nunclon Delta certified	25 cm² culture area	156367
Cell Culture Flasks	lture Flasks	75 cm² culture area	156499
	175 cm ² culture area	159910	
	225 cm² culture area	159934	
Nunc Cell	Nunc cell culture multidishes, Nunclon Delta certified	4-well	176740
Culture Plates		6-well	140675
		12-well	150628
		24-well	142475
		48-well	150687
	Nunc Edge 2.0 F96-well cell culture microplate	Nunclon Delta certified	167425
		Non-treated	267427
Nunc F96-well microplate, Nunclon Delta certified	Black	137101	
		White	136101
Nunc Conical Tubes Nunc 15 mL Conical Centrifuge Tubes	Bulk pack	339650	
		Racked	339651
Nunc 50 mL Conical Centrifuge Tubes	Bulk pack	339652	
		Racked	339653
Nunc Serological	Nunc Serological Pipettes, individually wrapped, paper/plastic peel	1 mL	170353
Pipettes		2 mL	170354
		5 mL	170355
		10 mL	170356
		25 mL	170357
		50 mL	170358

Notes

Notes

Notes

Find out more at thermofisher.com/cellcultureplastics

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