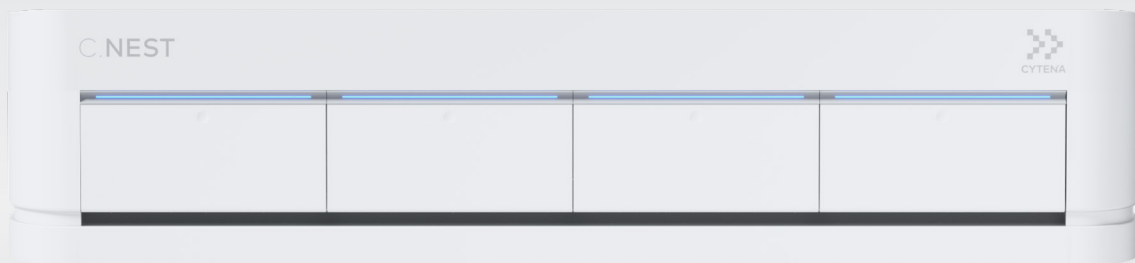


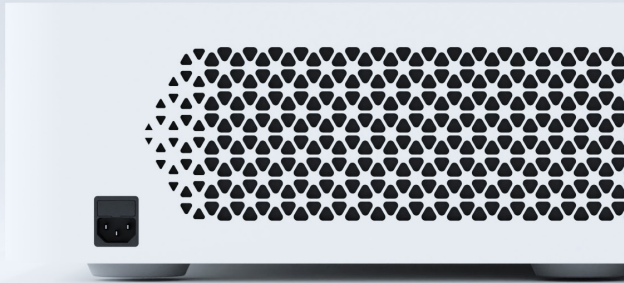
C.NEST®

Enable
adjustable
mixing in 96/24-
well plates

Innovative microplate agitation
culture system

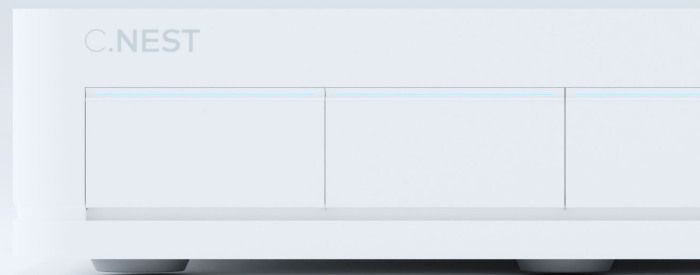


CYTENA BPS 
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C.NEST is a microplate agitation culture system designed to support superior cell growth and viability through its patented agitation technology.

The system empowers CHO cell upscaling in cell line development and enables the delicate cultivation of spheroids, organoids, and patient-derived blood cells.



What makes C.NEST different



Patented mixing
technology for 96/24-
well plates

- ↘ Adjustable, controllable mixing speed & pattern
- ↘ Homogeneous nutrients and higher oxygen transfer

Precisely-controlled
incubation in four
chambers

- ↘ Independent control for each chamber
- ↘ Constant monitoring of environmental conditions



The magic of CYTENA BPS mixing technology

Our patented reciprocating mixing technology makes adjustable mixing culture in 96/24-well plates possible.

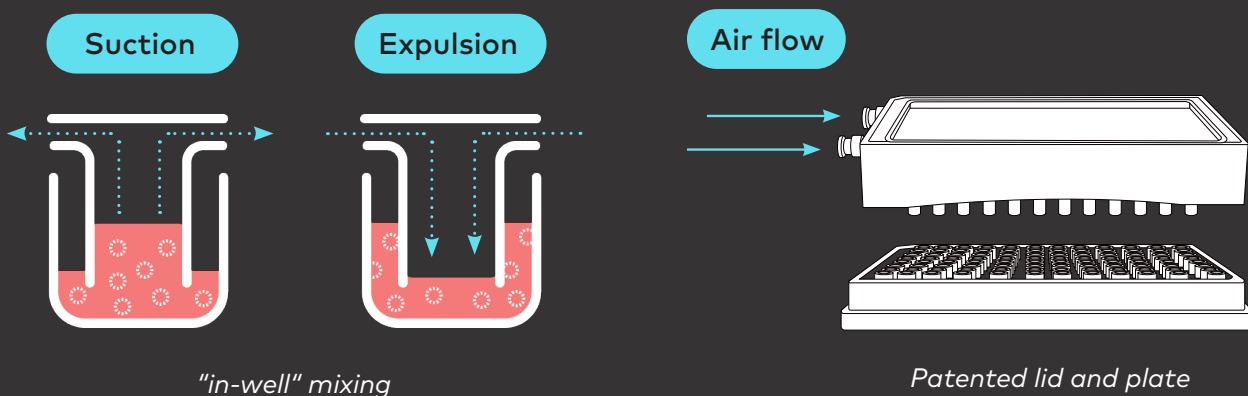


Homogeneous nutrient



Higher oxygen transfer rate

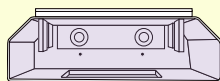
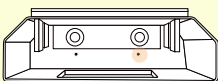
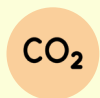
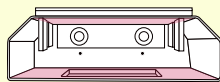
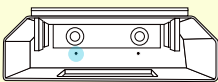
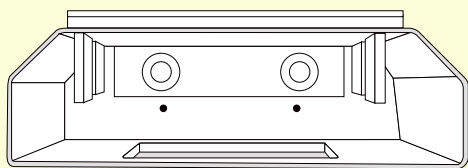
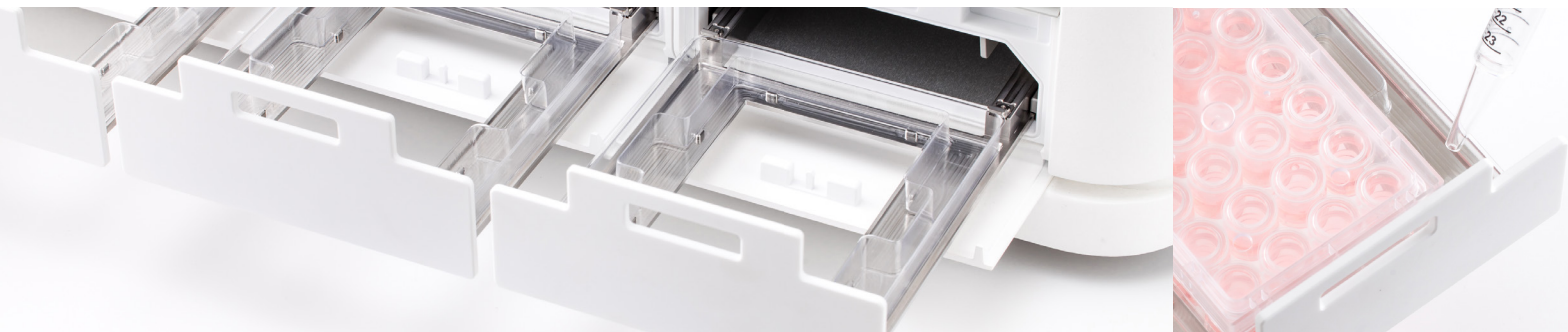
Elevate cell health effortlessly with our patented lid. With the oxygen transfer tubes engaging with each well, cells are offered a continuous oxygen supply to proliferate in a healthy environment.



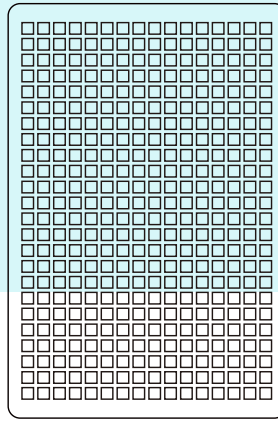
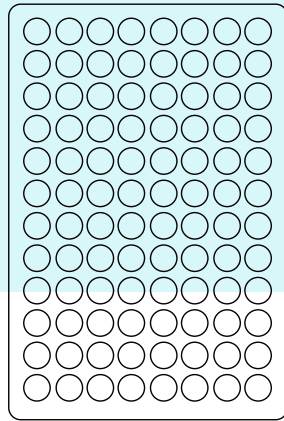
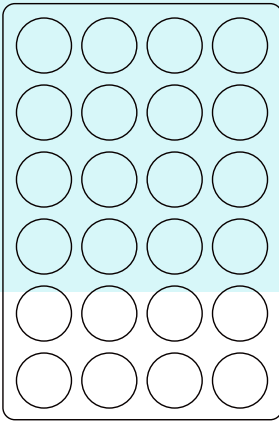
Miniature incubation chambers

Precise and independent control

- ↳ Water reservoir to maintain humidity
- ↳ Temperature control
- ↳ CO₂ level control
- ↳ Humidity monitoring
- ↳ UV light sterilization



The temperature and CO₂ levels can be monitored and adjusted in each NEST chamber. Humidity levels are monitored in real time and can be maintained by adding distilled water into the reservoir. UV sterilization can be activated independently for each NEST chamber.



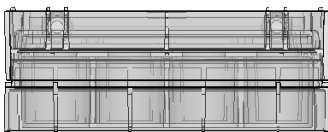
24
96
384

Flexible for both mixing and static culture

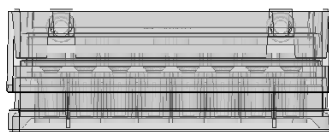
C.NEST allows for different settings and mixing patterns in the four independent chambers. One chamber can fit one 96 or 24-well plate and its corresponding patented lid for mixing culture.

The chamber height also allows for one 24-well plate or two 96 or 384-well plates to be placed in one chamber for static culture. Enjoy the flexibility of conducting mixing and static culture in parallel.

Mixing Culture



24-well plate
with NEST lid



96-well plate
with NEST lid

Static Culture



24-well plate
with standard lid



96-well plate
with standard lid



384-well plate
with standard lid

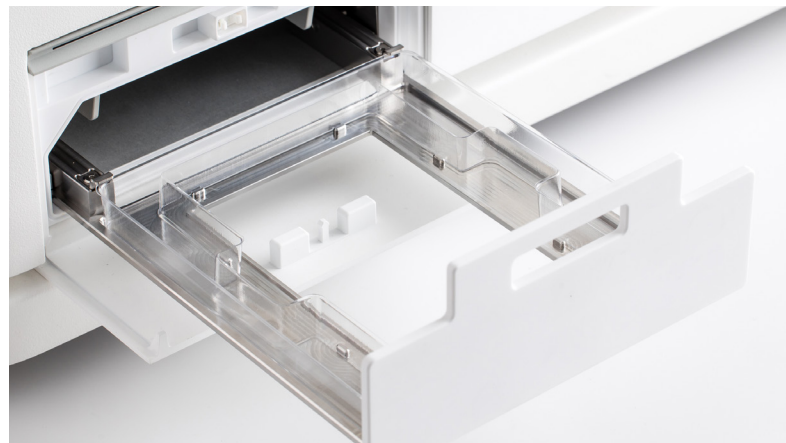
Effortless Maintenance for Seamless Operation

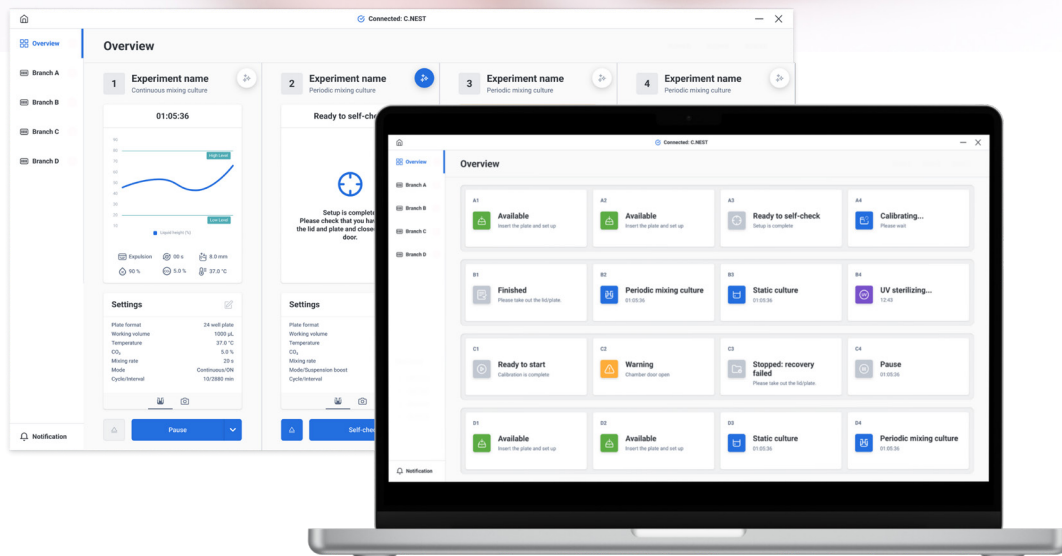
Removable plate holder

- ↳ Simplifies cleaning for enhanced operational efficiency
- ↳ Ensures maximum sterility and durability for repeated use

Disposable water tray

- ↳ Prevent carryover contamination with easy replacement





Scalable design

C.NEST can provide the capacity you require, maximizing efficiency and productivity.

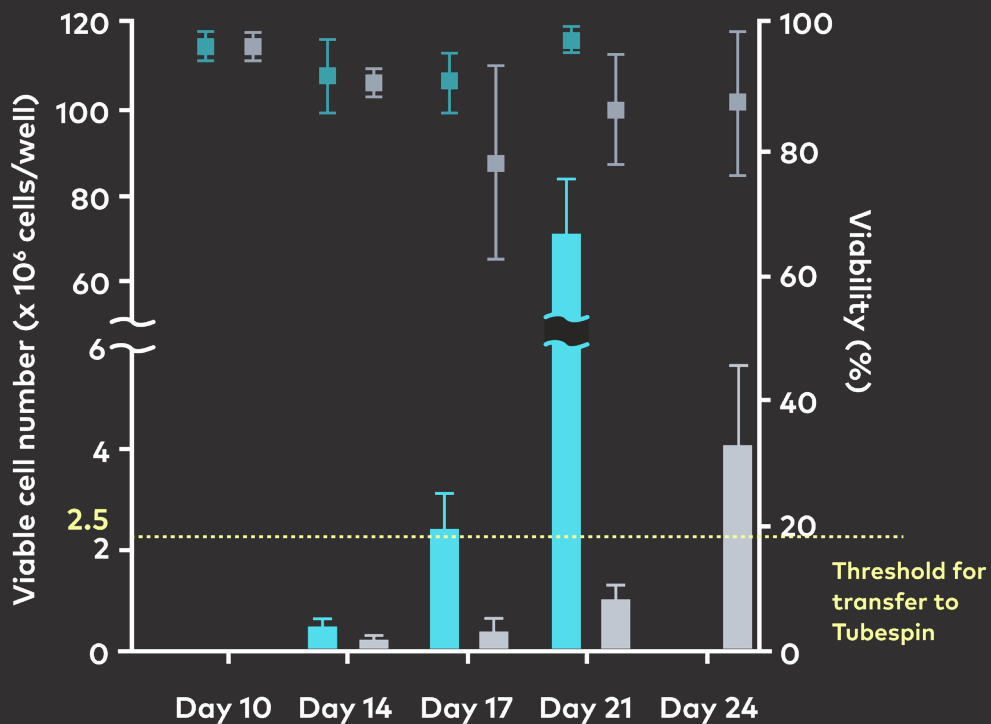
Scale experiments seamlessly with up to 16 chambers. Run up to four C.NEST in parallel and control all chambers effortlessly in one software interface.

Discover our featured application

~40 % time-saving in cell line development

Save cost, save labor, save time

C.NEST single cell expansion workflow



Single cell seeding → Day 10 → Day 14 → Day 17 → Day 21 → Day 24

	Day 10	Day 14	Day 17	Day 21	Day 24	
C.NEST	384 wp	96 wp	24 wp	Tube spin		
Traditional	384 wp	96 wp	24 wp	24 wp	6 wp	Tube spin

Specification

General characteristics

Description	Value	Unit
Dimensions		
Width	750	mm
Depth	460	mm
Height	190	mm
Weight	33	kg
Electrical characteristics		
Input voltage	100-240	Vac
Input voltage net tolerance	±10	%
Input voltage frequency	50/60	Hz
Max. input current	5.9-2.7	A
Power mains supply voltage fluctuations	±10	%
Installation category	CAT II	-
Input fuse type	250VAC, 8A, time-lag	-

Basic configuration

Description	Value	Unit
Incubation		
Temperature control range	RT+10 – 40 ± 0.2	°C
CO ₂ level control range	1 – 20	%
CO ₂ accuracy*	± 0.3	%
Humidity monitoring range	0 – 100 ± 5 (at 37°C)	%
Culture		
Mixing rate (24-well plate)	10 – 50 (± 5%)	sec
Mixing rate (96-well plate)	10 – 50 (± 5%)	sec
Working volume (24-well plate)	1,000–1,600	µl
Working volume (96-well plate)	150-200	µl

Each value above is specified with one standard deviation from its mean (M±1SD)

*The range of deviation is based on a 5% CO₂ set point and may vary with adjustments or if recalibration is needed.



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