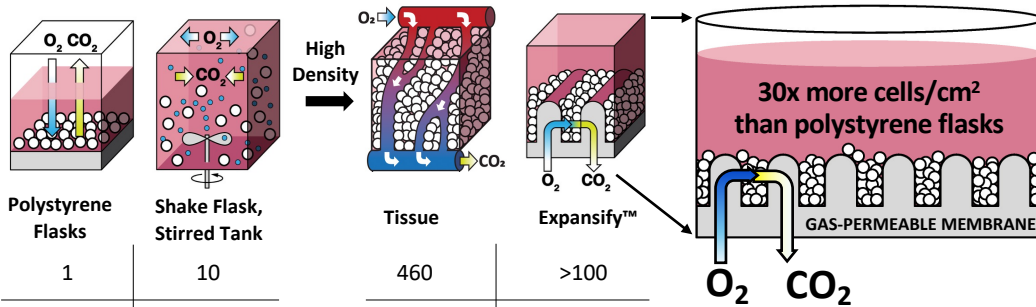


Overcoming the O₂ bottleneck enables tissue-like cell density *in vitro*

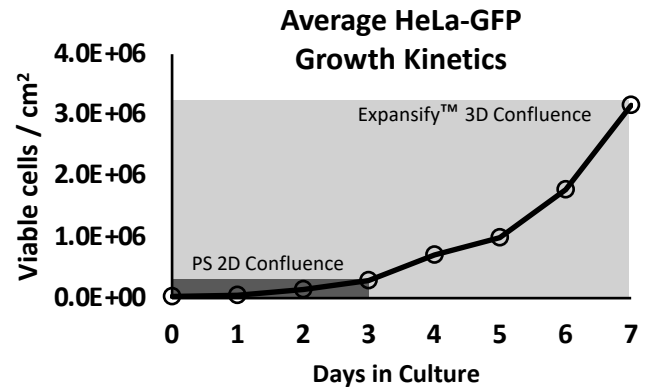
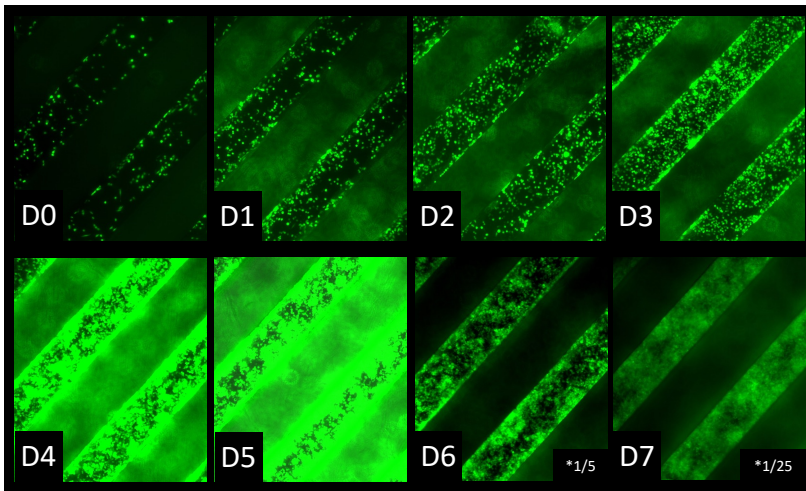
Expansify™ respiring cultureware features a gas-permeable membrane engineered for optimal oxygenation to enable intensified 3D culture of adherent, spheroid, or suspension cells.



Expansify™ enables:

- Optimal oxygenation
- Shear-free environment
- Cell retention
- Easy media exchange
- Linear scalability
- 3D culture

	Polystyrene Flasks	Shake Flask, Stirred Tank	Tissue	Expansify™
Mammalian Cells (1E6 cells / mL)	1	10	460	>100
O ₂ Turnovers, k_{1a} (1 / hr)	0.5	5	118	>100

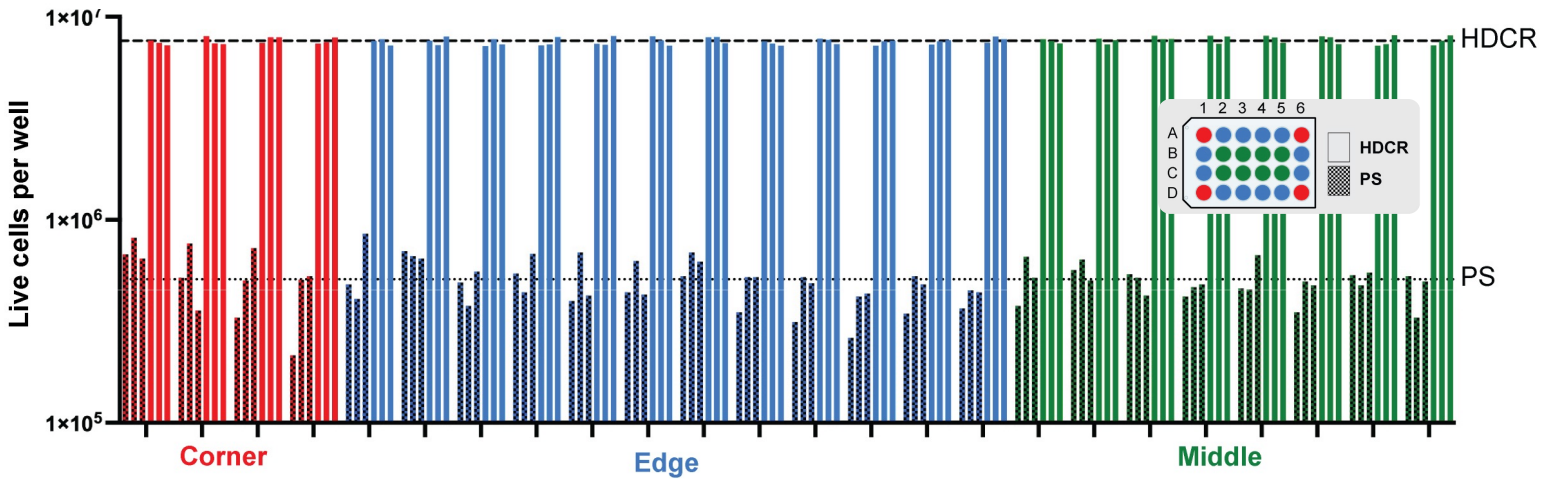


HeLa-GFP cultured in Expansify™ plates achieve >100-fold expansion in 1 week (D0= 2.6E4 cells/cm²; D7= 3.0E6 cells/cm²). *Fluorescence exposure reduced by 1/5 and 1/25 to stay within sensor range.

Expansify™ Plate and Tray Product Line

Yield (per cm ²)	96-Well Launch 2026	24-Well Available Now	6-Well Launch 2027	Single-Well Available Now	Gigacell™ RUO Tray Launch 2026 (Beta Units H1)
Expansify™: >3E6 cells					
Plates / Incubator	300	300	300	300	20
Total Cells (e.g. HEK293T)	1 million per well	8 million per well	35 million per well	250 million per plate	>1 billion per tray
Polystyrene: ~1E5 cells	 16 x 6-well plates	 24 x T-75	 6-9 x T-225	 11 x T-225 1.5 x 1720 cm ² flask	 44 x T-225 2x 10-stack

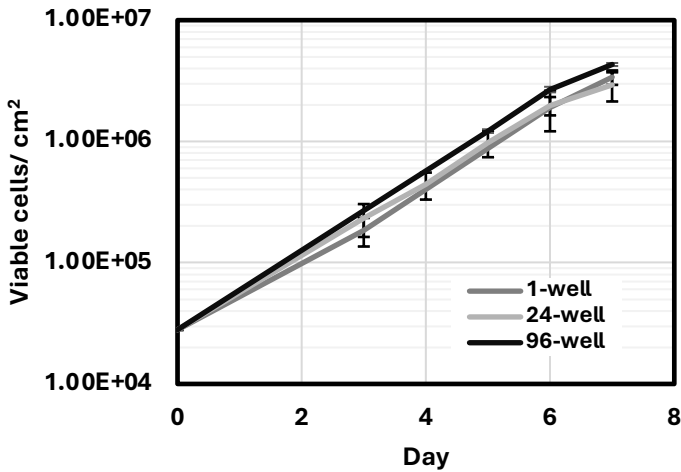
Eliminate Edge Effects with Expansify™



Raw suspension K562 cell count distribution across corner (red), edge (blue), and internal (green) wells. The Expansify™ plates show tightly clustered, consistent cell counts in all well positions, indicating uniform cell growth and absence of positional bias. In contrast, the polystyrene (PS) plates display broader variability, particularly at corner and edge wells, suggesting non-uniform growth and the presence of mild edge effects.

Linearly Scalable

HEK293T Growth Kinetics in Expansify™ Product Family

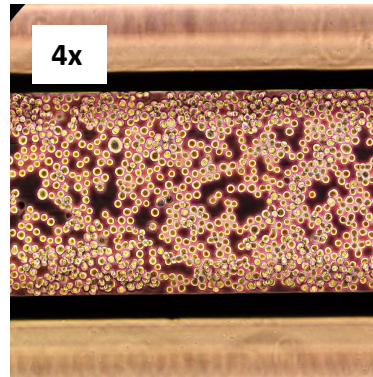


Expansify™ culture ware demonstrates consistent scalability over a 150-fold scale-up with no process optimization. 2.5×10^5 HEK293T cells/cm² were seeded and expanded for 7 days. 96-well (n=1; DT= 22.6 hrs), 24-well (n=3; DT= 24.4 hrs), 1-well plates(n=3; DT=23.8 hrs).

Imaging Compatible

Phase-contrast

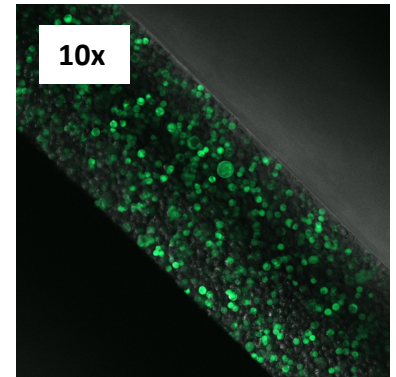
ECHO Revolve



3×10^5 suspension K562 cells/cm².

Confocal Microscopy

Zeiss LSM 980- 488 nm



Transfected GFP+ Expi293F, 5×10^5 cells/cm².

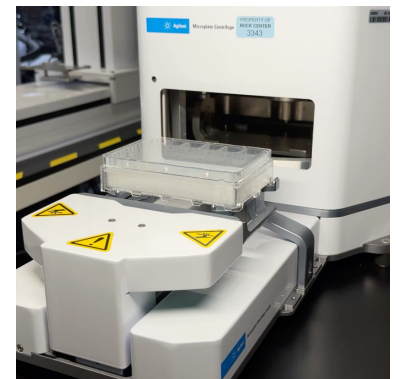
Automation Ready

Cellafa Bioscience



Maholo automated cell culture system using an Expansify™ 1-well.

Agilent Technologies



Automated microplate centrifuge-G5582A loading an Expansify™ 24-well.

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