# Advanced in vitro exposure systems





Cell Culture Inserts | cellQART®

## cellQART® Cell Culture Inserts

The ideal insert for your VITROCELL® exposure system.

cellQART® cell culture inserts by SABEU® are made entirely in-house, using high-quality plastics and membranes. Designed specifically for advanced lung cell exposure studies, they offer distinct advantages in applications such as Air/Liquid Interface (ALI) cultures, co-culture systems, and barrier function assessments.

cellQART® inserts create realistic ALI conditions, enabling lung epithelial cells to be exposed to air on the apical side while still receiving nutrients from the basolateral side.





SABEU® is a leading provider of microporous filter membranes and precision injection-molded components.

SABEU® develops products tailored to customer specifications, manufactures in serial production, and sets industry benchmarks with its cellQART®, TRAKETCH®, and FLUXX® product lines. All components are engineered to the highest technical standards and proudly Made in Germany.





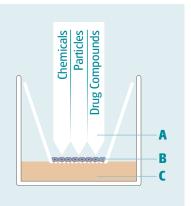
#### Exposure at the Air/Liquid Interface

All VITROCELL® exposure devices have been specifically designed to enable direct exposure of mammalian cells or tissue at the Air/Liquid Interface in physiologically relevant conditions. Here the cell cultures are not covered with media as opposed to submerged conditions which cause an undesired interaction of the formerly airborne substances with the culture media.

This approach allows for more credible and authentic results than by submerged exposure due to a closer replication of the human physiology.

#### Air/Liquid Cultivation and Exposure in Exposure Module

- A Direct and controlled exposure of test atmosphere to cells
- **B** Cells on membrane
- C Media below cells



#### **High-Quality TRAKETCH® Membrane**

The TRAKETCH® membranes are made from tissue culture-treated PET, gamma sterilized, RNase/DNase-free and non-pyrogenic. Available in a pore size ranging of  $0.4 \, \mu m$ , they ensure  $100 \, \%$  consistency in membrane parameters for highest reproducible cell culture results.

We offer two membrane versions:

- Clear PET: Provides ideal transparency for phase contrast and bright field microscopy.
- Clear extended culture PET: Optically identical to Clear PET, but with optimized pore density to support long-term cultures.





The cellQART® cell culture inserts integrate perfectly with all kinds of laboratory workflows.

#### Flexible Compatibility and Exceptional Customer Support

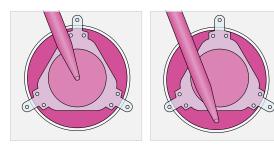
cellQART® cell culture inserts are designed for seamless compatibility with most standard cell culture plates and laboratory equipment, making them easy to integrate into both routine and custom project workflows.

Available in 6-, 12-, and 24-well formats – including flat-insert options – they come pre-loaded in well plates for immediate, efficient setup.

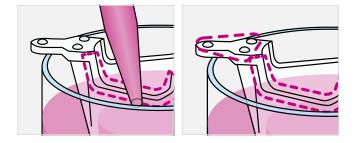
Our customers benefit from personalized support backed by over 20 years of experience.



#### **Designed to Make Your Work Easier**



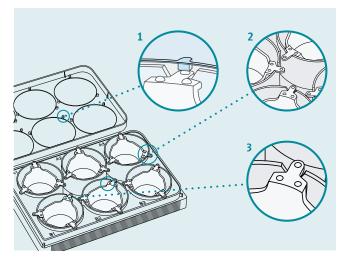
Wide window and asymmetric positioning for comfortable access to the cultivation vessel.



Lowered top edge and embossed spots on arms for easier access and better gas exchange.

#### Pre-loaded Well Plates with Functional Lid

- o For cell cultures or in vitro tissues.
- Distance holders (1) for proper oxygen exchange and secure transport position.
- 11° rotated (2) and stable deep placement (3):
  Prevents from overlapping and unwanted insert movement during pipetting.
- Ready for integration with automated workflows (e.g. tissue printing).
- Facilitates precise TEER electrode positioning for barrier function studies.
- Lid with condensation rings to prevent cross-contamination.



Lid with distance holders (1), rotated positioning (2) and specially designed insert arms to prevent insert movement (3).

#### **Standard or Flat Insert Technology Version**

- o Special feature: Flat Insert Technology (FIT)
- Up to 60% more medium capacity in the lower compartment, reducing media changes and saving time.
- Optimized for 24-well applications, ideal for parallel and automated workflows.
- Pre-loaded convenience ensures stable, consistent placement and rapid experimental setup.
- Reduced mechanical stress protects cell layers during long-term cultivation.
- Enhanced gas exchange and nutrient access for optimal cell health, especially during extended cultures.



With Flat Insert Technolgy (FIT) you have up to 60 % more medium capacity compared to standard sized inserts.



Price per Box with 4 Pre-loaded Well Plates Order-No.	6-well plates	12-well plates	24-well plates		24-well FIT plate:
	Fully loaded (24 inserts)	Fully loaded (48 inserts)	Fully loaded (96 inserts) Half loaded (48 inserts)		Half loaded (48 inserts)
PET clear	€ <b>129,03</b> V999100	<b>€ 243,31</b> V999102	€ <b>334,45</b> V999104	<b>€ 238,</b> – V999106	-
PET clear extended culture	€ <b>129,03</b> V999101	<b>€ 243,31</b> V999103	€ <b>334,45</b> V999105	<b>€ 238,–</b> V999107	€ <b>381,</b> – V999108
Insert Specifications	6-well	12-well	24-well		24-well FIT
Inner diameter (mm)	23.9	11.9	6.4		6.4
Outer diameter (mm)	26.9	14.9	9.4		9.4
Height (mm)	16.3	16.3	16.3		11.2
Growth area (cm²)	4.5	1.1	0.3		0.3
Insert working volume (ml)	1-4	0.2-0.8	0.1-0.4		0.1-0.3
Well working volume (ml)	2–4	0.9-1.8	0.6-1.5		1.6-2.1
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### **Order Information**

- Shipping worldwide in any quantities.
- See special offers in combination with V-CARE service contracts, in subscriptions or with VITROCELL® equipment bundles.



MODEL 1

### Discounted cellQART® Inserts with Your V-CARE Service Contract (12% off)

Get exclusive discounts with a V-CARE service plan.

#### **Qualified V-CARE Plans**



#### How it works

When you subscribe to or renew a VITROCELL® V-CARE service plan, you automatically qualify for exclusive discounts on all cellQART® cell culture inserts. With each order or retrieval, your lab benefits from reduced pricing — simply because you're covered by a V-CARE agreement.

#### **Key Benefits for You**

- Immediate Cost Savings: By bundling insert discounts into your existing V-CARE contract, you lower your day-to-day consumable costs.
- One-Stop Procurement: Since your inserts are ordered via V-CARE, you continue to work with the same Vitrocell contact for service, spare parts, and consumables.
- Predictable Budgeting: You know from the start that all future cellQART® insert orders will be shipped at the discounted rate, making it easier to forecast lab expenses.

#### Ideal when ...

- You already have (or are considering) a V-CARE service contract.
- You want to reduce consumable costs.
- You prefer working with a single trusted vendor for equipment and consumables.
- You prefer to lock in ongoing savings rather than manage separate discount programs.
- You like the flexibility combine this model with a subscription for maximum benefit.









MODEL 2

# Subscription-Based Supply of cellQART® Inserts (8% off)

Get regular deliveries of cellQART® inserts on a schedule that fits your workflow.

#### How it works:

You subscribe to regular deliveries of cellQART® inserts on a schedule that fits your workflow — monthly, quarterly, or another cadence of your choice. In return for your commitment to ongoing orders, you receive a subscription discount. Vitrocell automatically ships the agreed quantity and invoices you on a recurring basis.

#### **Key Benefits for You:**

- Zero Stock-Out Risk: A standing order ensures you always have fresh inserts on hand – no more last-minute rush orders or emergency shipments.
- Administrative Efficiency: Automated delivery and invoicing save your team time – just "set it and forget it."
- Cost Predictability: A fixed subscription price makes it simple to budget for insert costs over months or the entire year.
- Flexible reordering: If your lab's usage changes, just adjust your subscription quantity – no need to renegotiate each order.

#### Ideal when ...

- Your lab consumes inserts at a fairly consistent rate and cannot risk running low.
- You want to simplify purchase orders and reduce back-and-forth with suppliers.
- Prefer clear, recurring budget line items for consumables

#### **Well Plate Formats for the Subscription**

Pre-loaded Well Plates (Subscription-No.)	6-well	12-well	24-v	vell	24-well FIT Half loaded		
	Fully loaded	Fully loaded	Fully loaded	Half loaded			
PET clear	SUB-01	SUB-03	SUB-05	SUB-07			
PET clear extended culture	SUB-02	SUB-04	SUB-06	SUB-08	SUB-09		
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MODEL 3

### **Equipment Plus Consumable Bundles (5% off)**

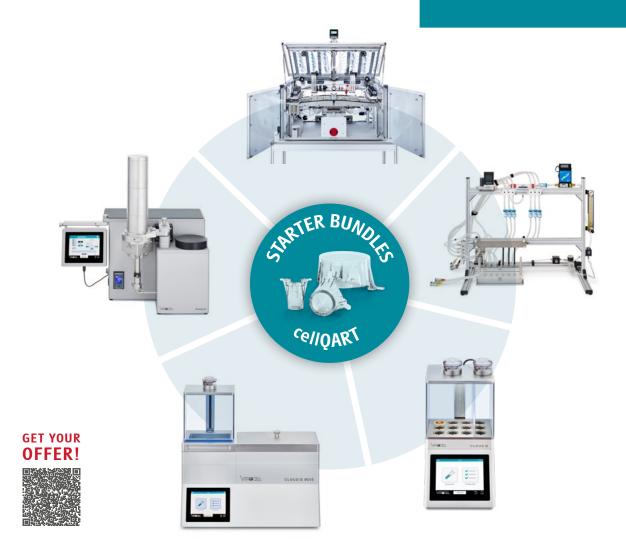
Get a discounted cellQART® starter pack with every new or updated VITROCELL® exposure system.

#### **Key Benefits for You:**

- Turnkey Solution: From day one, your order arrives with both equipment and sufficient inserts to begin initial experiments immediately – no extra ordering steps.
- Enhanced Value: With the discounted inserts, you lower the total cost of outfitting a new or upgraded system.
- Long-Term Channel Loyalty: When satisfied with how well cellQART® inserts perform, you may want to benefit from our long-term subscription options.
- Simplified Logistics: Your sales rep handles both the system purchase and consumable shipment together – fewer shipping times, invoices, and logistical headaches.

#### Ideal when ...

- You are acquiring a new exposure system or upgrading existing equipment.
- You want a simple, consolidated invoice for both your hardware and first supply of consumables.
- You prefer to see the maximum upfront savings on total system cost.
- You get started with Air/Liquid Interface exposures.





### **About VITROCELL®**

VITROCELL® exclusively concentrates on the developing, producing, installing, training and servicing of advanced in vitro exposure systems.

The VITROCELL® Systems' team is driven by their vision for new in-vitro standards through state-of-the-art technology, highly qualified workmanship and absolute client dedication. VITROCELL® has successfully collaborated with clients from leading research institutes, contract research organizations, regulatory authorities or industrial laboratories across the world. Working with our team experts, all modules have been tailored to create durable and complete turnkey-systems for *in vitro* inhalation toxicology. Gases, environmental atmospheres, nano particles and complex mixtures are analyzed on lung cells at the air/liquid interface using these systems. VITROCELL® technologies are also applicable to solutions for skin research.

Over a decade of devotion to research in this specific field has given our team of design & precision manufacturing specialists the opportunity to mentor highly diversified and complex projects from conception to completion. We strive to become a constructive member of each research team, providing support when it is needed, advice when it is required and modules of the highest quality, which are even polished by hand before leaving here to be integrated into your workspace. Every piece of our German engineered equipment is manufactured to the highest of standards – yours.

For more information please scan:

