



Ambr® 15 Cell Culture Generation 2

Options, Accessories and
Consumables

Simplifying Progress

SARTORIUS

Ambr® 15 Cell Culture Generation 2

System Configuration Options

System Configurations

Ambr® 15 Cell Culture Generation 2 system is available in the following configurations;

- 24 vessel system standard
- 24 vessel system cooled
- 48 vessel system standard
- 48 vessel system cooled

Cooled systems include extended low temperature 20 – 40°C range and additional chilled plate positions.



For more information, please visit

[www.sartorius.com/en/products/fermentation-bioreactors/
ambr-multi-parallel-bioreactors/ambr-15-cell-culture](http://www.sartorius.com/en/products/fermentation-bioreactors/ambr-multi-parallel-bioreactors/ambr-15-cell-culture)

Integrated at-line analyzers

The following at-line analyzers can be integrated with the Ambr® 15 Cell Culture systems:

- Ambr® Analysis Module for pH and spectroscopy
- Nova Biomedical BioProfile® FLEX2 for cell counting, pH and metabolite analysis
- Vi-CELL XR for cell counting
- Roche Cedex HiRes for cell counting

See page 4 for further details.



Further Options and Accessories

Rapid Vessel Drain Option

Capability to rapidly remove large volumes of culture or spent media from each Ambr® microbioreactor in a single step. See page 5 for further details.

Deck Furniture

Additional deck furniture available for setting up pipette tip boxes, plates, tip box lids and plate lids in the flexible positions on the right hand side of the deck. See pages 6 and 7 for further details.

Centrifuge Adapters

Centrifuge adapters designed to hold Ambr® 15 Cell Culture microbioreactors for centrifugation steps as part of perfusion mimic operations, media exchanges and end-point harvesting. See page 6 for further details.

Integrated At-Line Analyzers

For further information please see the
Integrated Cell Culture Analyzers brochure

Ambr® Analysis Module

Supply and integration of analysis module for at-line pH measurements, or for both pH and spectroscopy analysis.



Nova Biomedical BioProfile® Flex2 cell culture analyser

Integration with customer supplied Nova Flex2 and ESM (external sampling module) for cell counting, pH and metabolites analysis.



Beckman Coulter Vi-CELL XR cell counter

Integration with customer supplied Vi-CELL XR for cell counting.



Roche Cedex HiRes cell counter

Integration with customer supplied Cedex HiRes for cell counting.



Further Options and Accessories

Rapid Vessel Drain Option

Rapid Vessel Drain is available as an option (new systems) or as a field upgrade (existing systems) for Ambr® 15 Cell Culture Generation 2. Please note it is not compatible with Ambr® 15 Cell Culture Generation 1 or Fermentation systems.

Includes a dedicated 1 mL vessel drain pipette mandrel, external vessel drain pump, rapid vessel drain software steps, pump tubing set and 2 L vessel drain waste container.



Pipette Tip Bin

Pipette tip bins connect to the Ambr® 15 Cell Culture Generation 2 deck for collection of discarded pipette tips. The small and large pipette tip bins, made from polypropylene, are easily connected and disconnected via magnetic coupling and can be used interchangeably on the system workstation.

Please note that these pipette tip bins do not fit onto the Ambr® 15 Cell Culture Generation 1 or the Ambr® 15 Fermentation systems.

Ambr® 15 pipette tip bin,
small



Ambr® 15 pipette tip bin,
large



Accessories

Ambr® 15 Cell Culture clamp plate

Part no. 001-0B38

Each clamp plate makes direct connections to Ambr® 15 vessels in a culture station for the impeller drive system and gassing.

It is essential for continued operation of the Ambr® 15 Cell Culture system that spare | replacement clamp plates are available; to speed up experiment turnaround and avoid system downtime.

Clamp plates must be cleaned between experiments, and if they show signs of damage they will need to be replaced. It is recommended that clamp plates are not used for longer than 1 year | 20 autoclave cycles, whichever comes sooner.



Centrifuge Adapters

Part no. 001-8B49

Set of 4 centrifuge adapters, each adapter holds 3 Ambr® 15 Cell Culture microbioreactors. Compatible with YCSB-B8B buckets for Centrisart® G-16 and G-16C centrifuges.



Ambr® 15 plate lid holder

Part no. 001-8B45



Ambr® 15 Sartorius tip box holder

Part no. 001-8B48

Compatible only with Sartorius Ambr® 1 mL and 5 mL tips for Ambr® 15 Cell Culture instruments serial no. R1, R3, R4 and R5. New Ambr® 15 Cell Culture instruments with serial no. R6 onwards do not require a tip box holder, the tip boxes fit directly onto the workstation deck.



Ambr® 15 Sartorius tip box lid holder

Part no. 001-8B47

Compatible only with Sartorius Ambr® 1 mL and 5 mL tips.



Ambr® 15 universal plate holder

Part no. 001-8B46



Ambr 15® Cell Culture Microbioreactors

Ambr® 15 Cell Culture microbioreactors with sparge

Part no. 001-7B01

Ambr® 15 single use microbioreactor with sparge tube, are designed to mimic the characteristics of larger scale bioreactors. The vessels include an integrated pitched blade impeller, sub-surface sparge tube, pH and DO sensor spots.

Pack contains 24 irradiated vessels, individually wrapped.



Ambr® 15 Microbioreactors with Temperature Compensation

Recommended for use with the cooled Ambr® 15 Cell Culture, these vessels are precalibrated for use over a wider temperature range. Additional calibration data extends the range of accurate pH measurement and control for culture temperatures below 33°C.

Ambr® 15 Cell Culture microbioreactors with sparge, 20-40°C

Part no. 001-7B03

Ambr® 15 Cell Culture microbioreactors, no sparge, 20-40°C

Part no. 001-7B04

 For more information, please visit

[www.sartorius.com/en/products/fermentation-bioreactors/
ambr-multi-parallel-bioreactors/ambr-15-cell-culture](http://www.sartorius.com/en/products/fermentation-bioreactors/ambr-multi-parallel-bioreactors/ambr-15-cell-culture)



**Ambr® 15 Cell Culture
microbioreactors, no sparge**
Part no. 001-7B02

Ambr® 15 single use microbioreactors without a sub-surface sparge tube. Gassing is into the vessel headspace. The vessels include an integrated pitched blade impeller, inlet gassing port into the headspace, pH and DO sensor spots.

Pack contains 24 irradiated vessels, individually wrapped.

Production Transfer of Ambr® 15 Cell Culture Microbioreactor Vessels

With the growth in the number of Ambr® 15 Cell Culture systems in use, we have changed our manufacturing processes to enable us to meet current and future demand for the Ambr® 15 Cell Culture microbioreactor vessels. Production of vessels with 7B part numbers has moved to our main consumables manufacturing site in Stonehouse UK.

The Stonehouse site specializes in manufacture of plastics for Sartorius and has excellent capability in terms of consistency and productivity. This brings the entire

manufacturing process in-house for full control of the supply chain and better quality control. The change of production site includes new manufacturing equipment, multi-cavity mould tools and additional assembly lines.

The new (part no. 7B) Ambr® 15 Cell Culture microbioreactor vessels include minor design changes that have been implemented to improve reproducibility across batches. Furthermore, the same raw material is now used for Ambr® 15 and Ambr® 250 vessel components.

Plates and Tips

1 mL pipette tips for Ambr® 15

Part no. 001-2B48

Sartorius Ambr® 1 mL pipette tips without filters for use with Ambr® 15 Cell Culture systems. Pipette tips and racks are E-beam pre-sterilized. Pack contains 10 racks of 96 tips.

Please note that these new Sartorius Ambr® automation tips are only compatible with new systems (serial no. R6) and upgraded systems with compatible liquid handler.



5 mL pipette tips for Ambr® 15

Part no 001-2B49

Sartorius Ambr® 5 mL pipette tips without filters for use with Ambr® 15 Cell Culture systems. Pipette tips and racks are E-beam pre-sterilized. Pack contains 5 racks of 24 tips.

Please note that these new Sartorius Ambr® automation tips are only compatible with new systems (serial no. R6) and upgraded systems with compatible liquid handler.



For more information, please visit

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ambr-multi-parallel-bioreactors/ambr-15-cell-culture](http://www.sartorius.com/en/products/fermentation-bioreactors/ambr-multi-parallel-bioreactors/ambr-15-cell-culture)

1 Well plates

Part no. A-0068

Single well plates are ideal for media filling during experiment setup. The large volume reduces the manual pipetting work and is ideal for experiments using a single media type. Pack contains 25 sterile plates with lids, individually wrapped. Working volume 240 mL per well, 1 well per plate.



24 Well deep well plates

Part no. A-0038

24 well deep well plates hold reagents and feeds on the workstation deck, before being added to Ambr® 15 vessels. The plates can also hold samples harvested from Ambr® 15 vessels. Pack contains 25 sterile plates with lids, individually wrapped. Working volume 8 mL per well, 24 wells per plate.



4 Row plates

Part no. A-0067

4 row plates hold reagents and feeds on the workstation deck, before being added to Ambr® vessels. The intermediate volume makes these plates suitable for media screening or large volume reagents such as base. Pack contains 25 sterile plates with lids, individually wrapped. Working volume 60 mL per well, 4 wells per plate.



Ambr® 15 Consumables Contracts

Ambr® 15 consumables are also available to order as part of a supply contract. With regular pre-agreed shipments, the consumables contract removes the need for frequent re-ordering of Ambr® 15 consumables.

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