

# New Products

## Refrigerated Incubator



**Product:** Cost-Effective Refrigerated Incubator.  
**Name & Manufacturer:** Heraeus BK 800 refrigerated incubator from Thermo Scientific Heraeus.

**Technology:** The unit has a footprint of 0.3 m<sup>2</sup> and a capacity of 220 L. It is CE certified and has obtained best-in-class energy efficiency ratings. Providing a homogenous, stable environment with temperature uniformity ranging from 3 to 40 °C, the BK 800 is suited for sample and media storage, microbiological testing and biochemical oxygen demand protocols. With two internal electrical sockets, the BK 800 can accommodate stirrers, shakers and lights that can be time controlled for defined cycles.

**Advantages:** An impact-proof interior with rounded edges makes the unit easy to clean, minimizing the risk of contamination. Furthermore, all internal shelves and supports are easily removable to aid the cleaning process. The inclusion of a reversible door enables left or right handed opening and the door gaskets are simple to replace.

**More Information:** [www.thermo.com/hot](http://www.thermo.com/hot)

## Digital Imaging

**Product:** Image-based Cell Counter and Analyzer systems for automated cell culture analysis.

**Name & Manufacturer:** Cedex HiRes from Roche Innovatis.

**Technology:** Cedex HiRes measures cell density, viability, aggregation rate, cell morphology, and cell debris using the Trypan Blue exclusion method, with high-resolution digital image recognition. Up to 20 individual samples of 300 µl each are handled by the multi-sampler. Cell staining and mixing tasks are automated, as



are focus adjustments. Cedex HiRes produces images with pixel resolution of 0.8 µm, enabling the distinction of objects with a distance of less than 2 µm to each other. Detectable cell diameter range is 2 µm – 40 µm, and object diameter range of 1 µm – 90 µm. Digital image recognition allows for permanent storage of acquired data.

**Advantages:** The exceptional image quality allows deeper insights into subtle changes in a cell culture, such as monitoring baculovirus transfections for protein production via measurement of cell diameter changes.

**More information:** [www.roche.com](http://www.roche.com)

## Pipetting



**Product:** Single-channel pipette.

**Name & Manufacturer:** Research plus single-channel pipette from Eppendorf.

**Technology:** The latest version of the Eppendorf Research plus single-channel pipette weighs 71 g (lightest version of fix volume pipette). Conventional pipettes weigh up to 125 g and thus subject the muscles to unnecessary strain. Apart from the low weight, the low power needed to operate the pipette makes it easy to use: only 1.2 - 1.5 N is needed to move the control button.

Conventional pipettes require up to 6 N and are therefore significantly harder to operate.

**Advantages:** A real relief if you have to perform multiple dispensing operations in your daily routine.

**More Information:**

[www.eppendorf.com/research-plus](http://www.eppendorf.com/research-plus)

## Analytical Ultracentrifuge



**Product:** Systems for precise macromolecule aggregation measurement.

**Manufacturer:** Beckman Coulter.

**Technology:** Newly designed centerpieces used in the Beckman Coulter XL-A and XL-I instruments – the only analytical ultracentrifuges on the market today – allow the systems to provide precise, repeatable measurement of pharmaceutical sample aggregation.

Beckman Coulter initially developed the centerpieces for researchers at a leading biotechnology company who wanted to use analytical ultracentrifuges (AUCs) in processes that required greater run-to-run reproducibility. The work resulted in enhancements to the carbon epon (epoxy) and aluminum epon centerpieces that improve the systems' protein aggregation measuring capability by increasing precision and accuracy from test to test.

The XL-A, with absorbance optics, provides the selectivity and sensitivity to measure protein behaviour at wavelengths between 190-800 nm. The XL-I adds Rayleigh interference optics, allowing the use of UV-absorbing buffers and the ability to study highly concentrated samples.

**Advantages:** The XL-A/XL-I analytical ultracentrifuges aide drug discovery and vaccine development processes by characterizing a protein's behaviour in free solution under physiological concentrations, temperatures and buffer conditions. The AUCs feature an operating system that does not require calibration or the use of standards, allowing measurements of proteins and other macromolecules to be characterized as interacting – not isolated – elements.

**More Information:** [www.beckmancoulter.com](http://www.beckmancoulter.com)