

# HOW IT WORKS

## Protecting Valuable Samples

**Problem:** High performance laboratory freezers are one of the most essential pieces of equipment in any laboratory, and researchers worldwide depend on them everyday to provide critical protection and storage for valuable samples, many of which are irreplaceable. Many biological samples, such as DNA, RNA, cells, and protein samples, must be stored at below-freezing temperatures in order to prevent degradation and preserve them for future reference, analysis or use. Therefore, protecting the integrity of research samples is very important.

When you are storing what could be your life's work, not just any freezer will do. A freezer door opened frequently or for extended periods of time could expose your samples to warm air, creating an opportunity for decreased sample integrity. It is critical to choose a unit that provides a constant temperature within the freezer and delivers rapid temperature recovery after accessing your samples to maintain sample integrity. Your freezer selection is one of the most important decisions you will make in your lab.

**Solution:** A series of freezers of different capacities that combine reliability and performance with cost-effective operation and practical features. The Thermo Scientific Revco® PLUS series of upright -86°C freezers are designed for maximum performance and are suited for all laboratories. All Thermo Scientific Revco PLUS models: Revco Ultima® PLUS, Revco Elite® PLUS, and Revco Value® PLUS, feature the same advanced patented refrigeration technology and a new robust electronics platform. Valuable samples are protected by combining great rapid temperature recovery, temperature stability, and



**Figure 1. Thermo Scientific Revco PLUS -86°C upright freezers include three models: Revco Ultima PLUS, Revco Elite PLUS and Revco Value PLUS**



**Figure 2. Thermo Scientific Revco PLUS -86°C upright freezers protect valuable samples by combining temperature stability, maximum recovery time, and energy efficiency.**

operational efficiency, all in a productive and comfortable lab environment. In addition, programmable, easy-to-use microprocessor controls provide real-time monitors and precise temperature settings, power and other critical parameters, further ensuring the security of samples.

The new Thermo Scientific Revco PLUS upright freezers feature advanced refrigeration technology that provide more heat removal capacity ensuring rapid temperature recovery after door openings. This also decreases the risk of sample degradation created by the freezer door being open for extended periods of time and protects the integrity of valuable samples. Thermo Scientific Revco PLUS freezers also feature various rack configurations to ensure the easy retrieval of precious samples and minimize exposure to ambient conditions.

Thermo Scientific Revco PLUS freezers require less power to efficiently maintain cabinet temperature. This reduces heat emissions into the lab environment, meaning that Thermo Scientific Revco PLUS freezers reduce air conditioning and energy costs and maximize operational efficiencies. Thermo Scientific Revco PLUS freezers have minimal noise output due to advanced noise abatement technology and insulation. This allows the units to reside directly in the lab, which speeds sample preparation and minimizes sample exposure to ambient air. Researchers, who spend many hours surrounded by lab equipment, will also benefit from a quieter and more productive, efficient, and comfortable working environment.

For more information on Thermo Scientific Revco PLUS freezers, visit [www.thermo.com/revcoplus](http://www.thermo.com/revcoplus).