

Lyophilization, also known as freeze-drying or cryo-desiccation, is the process of removing water from a sample without the need to apply heat, to stabilize the sample. Besides increasing sample shelf life, freeze-drying samples also reduces sample weight and volume, reduces the risk of contamination and eliminates the need to refrigerate samples, decreasing shipping and storage costs.

Our Lyo-Stable™ service, powered with Ready-to-Go™ stabilization technology, offers complete reagent and assay stabilization solutions, tailored to meet your needs:

- **Scalability:** Flexible facilities, with multiple freeze driers and manufacturing methods, ensure scalability throughout the process.
- Quality: ISO9001 compliant facilities deliver reliable quality.
- **Global logistics:** Global supply chain support to deliver your stabilized products to your facilities world-wide.

Typical stages of the Lyo-Stable process

Based on your requirements we will develop your minimal viable product to assess functionality, stability and appearance.

Further proof-of-principle studies will then optimize your product and ensure that we can scale the product up and meet quality standards.

Our analytical experience, combined with state-of-the-art instrumentation and stabilization technology, ensures precise control of the product as it progresses through manufacturing, resulting in a product that meets the highest standards and specifications. Batch-to-batch reproducibility is an important characteristic of every product we manufacture.

Put the expertise and experience of our dedicated Lyo-Stable team to work for you.





Multiple lyophilization formats

A wide range of formats, excipients, dispensing options and custom labeling are available to meet your product specifications.

	Cakes	Beads
Batch capacity	5000–25 000 reactions	5000–300 000 reactions
Dispense volume	5–100 μL	Currently 10–30 μL
Dispensing options	Manual, automated	Automated
Plastic ware	PCR plates, customer designed device or cartridge	96-well plates/strips/tubes and bulk beads

Your made-to-order cake or bead will contain our proprietary excipient mix to stabilize your temperature-sensitive assay for storage and shipping at ambient temperature. All you need to add is your sample and you are ready to go!

Why lyophilize?

Feature	Benefits
Stabilization based on a proprietary mixture of a range of excipients combined with lyophilization	 Provides up to two years' room-temperature stability, with no loss of activity.* Stable at a wide range of temperatures
Pre-dispensed, single-dose reagents	 Requires fewer pipetting steps Reduces contamination risk Requires less sample handling Improves data quality Reduces training requirements Compatible with downstream applications and automation
Simplified logistics and reduced environmental effects	 Does not require dry or wet ice shipment Simplifies shipping across countries Provides significant cost savings Reduced weight and volume make lyophilized samples more environmentally friendly for shipping
No need for refrigerator or freezer storage	 Supports applications for field use Enables storage in remote or lowaccessibility regions Enables storage in locations with limited infrastructure Provides significant cost savings

^{*}Based on our standard Ready-to-Go portfolio

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