

Leadshpere™ Lyophilization Technology



What are the benefits of the freeze-drying format?

- ✓ No more cooling system
- ✓ Reduced assay turnaround time
- ✓ Ease of handling for IVD tests
- ✓ Ideal for point-of-care testing

Why choose Leadsphere™ technology?

- ✓ Sphere format to ease aliquot
- ✓ Assure activities of your biomolecules
- ✓ Work with 20 μl mixture (~ 3.3 mm diameter) or more
- ✓ Fully custom process and customer support

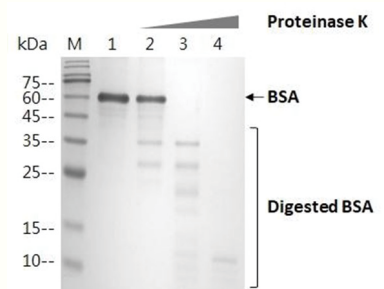


LEADSPHERE™ Lyophilization Technology serves as a platform to ease the development of your reagents in lyophilized and in stable sphere format while maintaining the components' bioactive condition at room temperature for at least 12 months. A notable example is **LEADSPHERE™ Proteinase K**, which has all advantages of LEADSPHERE™ Lyophilization Technology and further features in

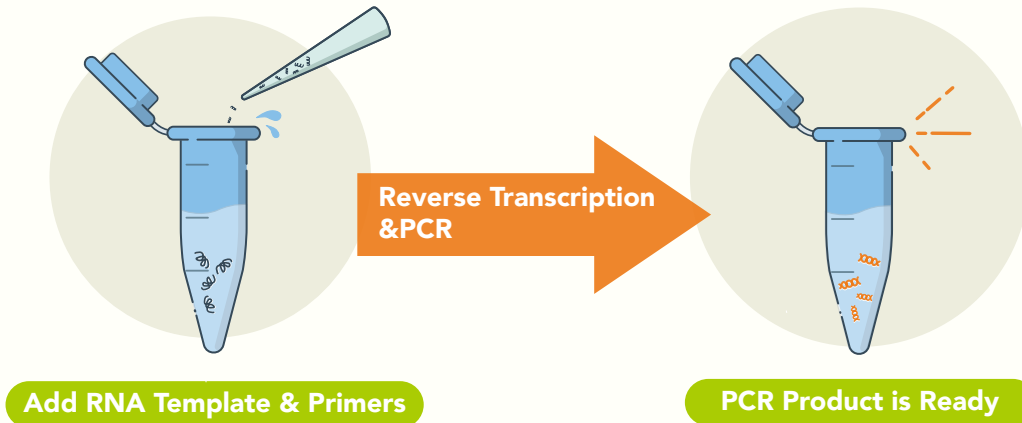
- ✓ Supports “pick and place” automation system for commercial-scale production.
- ✓ Reduces pipetting step and simplifies protocols for end users.
- ✓ Allows direct mixing with various sample types.

Molecules that can be used in LeadSphere™ technology:

Antibodies, Proteins, Enzymes, Chemicals, PCR Mixture



Leadgene® One-step RT-PCR Master Mix



Reverse transcription (RT) and PCR can be performed as a one-step process by combining a reverse transcriptase and a DNA polymerase, allowing a specific and swift nucleic acid amplification using RNA as a template. This simple reaction requires a complex and optimized buffer system, and it can be accomplished with Leadgene's innovative one-step RT-PCR master mix.

What are the benefits of Leadgene® One-Step RT-PCR Mix?

- ▶ Trump the traditional two-step method, which requires converting RNA to cDNA before PCR amplification.
- ▶ Compatible with Leadsphere™ Lyophilization Technology for a lyophilized format (glycerol-free)
- ▶ Optimized for quantitative PCR and isothermal PCR systems in various composition sets for different assay conditions:

| PCR System | Detection Method | Product |
|---------------------------|------------------|--|
| One-step quantitative PCR | Fluorescence | Leadgene® 2X One-Step Probe RT-qPCR Master Mix |
| | Fluorescence | Leadgene® 5X One-Step Probe RT-qPCR Master Mix |
| One-step isothermal PCR | Colorimetry | Leadgene® 2X Colorimetric RT-LAMP Master Mix |
| | Fluorescence | StablePlus™ 2X Colorimetric RT-LAMP Master Mix |
| | Fluorescence | Leadgene® 2X Fluorescent RT-LAMP Master Mix |
| | Fluorescence | StablePlus™ 2X Fluorescent RT-LAMP Master Mix |

