

Lyo-Ready Probe 1-Step Kit



- Advanced glycerol-free 4x formulation
- Designed for multiplex diagnostic assays
- Manufactured under ISO 13485

Lyo-Ready Probe 1-Step Kit is a lyophilisable 1-Step RT-qPCR kit designed for ultra-sensitive detection of RNA sequences. Specially formulated with a blend of excipients, the kit delivers reliable performance post-lyophilisation and is ideal for the development of diagnostic assays that require room temperature storage.

Features

- Ultra-sensitive detection of RNA
- Offers the same high performance post-lyophilisation as our standard kits
- Includes a glycerol-free 4x qPCR mix
- Pre-blended with excipients for reliable lyophilisation into beads or cakes
- Provided with separate, high-concentration UltraScript RTase (with RNase inhibitor)
- Validated for qualitative detection of SARS-CoV-2 nucleic acid
- Compatible with high-throughput, highly-multiplexed assays

Applications

- Development of lyophilised molecular diagnostic tests
- Detection of extremely low copy number targets
- TaqMan®, Scorpions® and molecular beacon probes

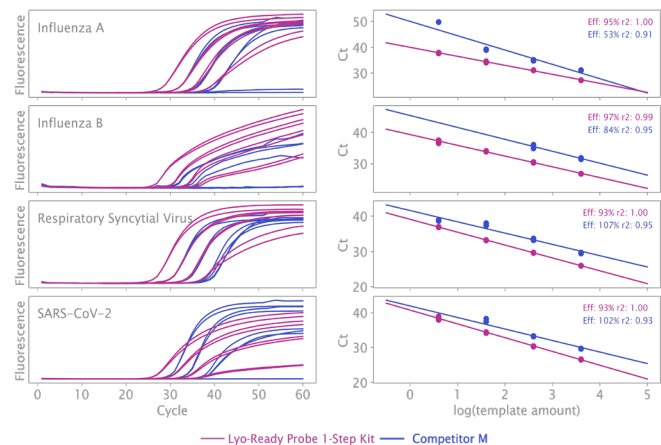


Fig 1. Better performance after lyophilisation in a multiplex setup compared to a competitor mix

Multiplex amplification of common winter viruses (Influenza A, Influenza B, Respiratory Syncytial Virus, and SARS-CoV-2) using Lyo-Ready Probe 1-Step Kit (purple curves) or the 1-Step mix from Competitor M (blue curves) after complete lyophilisation and reconstitution with water. Ct values are shown in the left panels and efficiency in the right panels. 4 serial dilutions of RNA template were used, corresponding to 4000, 400, 40 and 4 copies of each viral genome. The total reaction volume was 20 μ L. Cycle conditions were 45 $^{\circ}$ C 20 min, 95 $^{\circ}$ C 3 min and 50 cycles of 95 $^{\circ}$ C 15 s, 60 $^{\circ}$ C 30 s. Lyo-Ready Probe 1-Step Kit shows a better efficiency and sensitivity after lyophilisation compared to Competitor M.



PCR BIOSYSTEMS
simplifying research

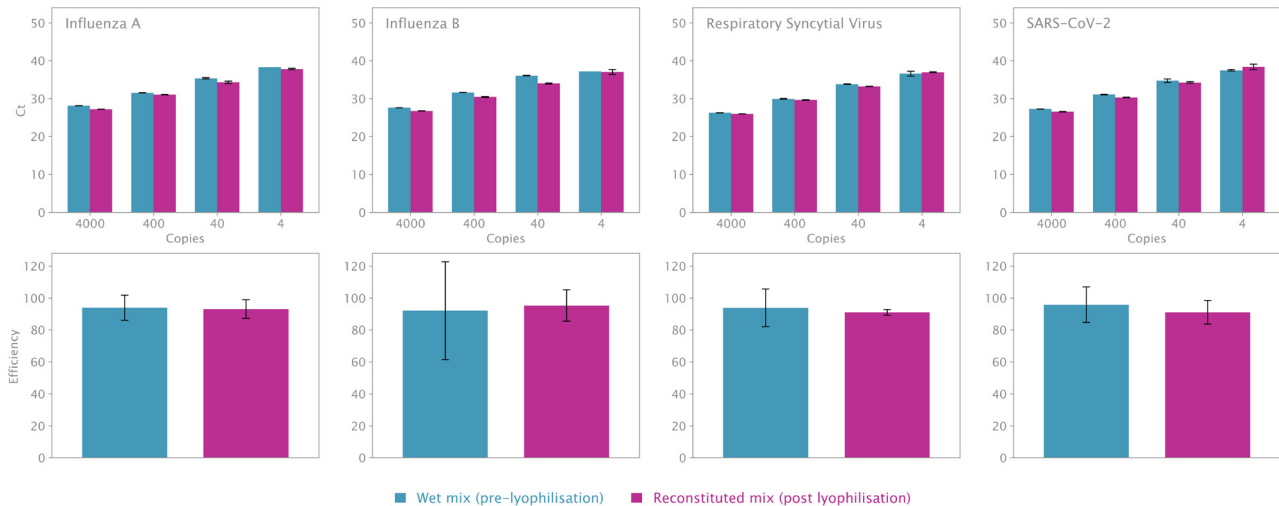


Fig 2. Reliable performance after lyophilisation in a multiplex setup

Multiplex amplification of common winter viruses (Influenza A, Influenza B, Respiratory Syncytial Virus, and SARS-CoV-2) using the Lyo-Ready Probe 1-Step Kit as a wet mix (blue bars) or as a reconstituted mix with water after lyophilisation (purple bars). Ct values are shown in the top panels and efficiency in the bottom panels. 4 serial dilutions of RNA template were used, corresponding to 4000, 400, 40 and 4 copies of each viral genome. The total reaction volume was 20 µL. Cycle conditions were 45 °C 20 min, 95 °C 3 min and 50 cycles of 95 °C 15 s, 60 °C 30 s. Lyo-Ready Probe 1-Step Kit shows no significant loss of efficiency or sensitivity after lyophilisation.

Optimised for lyophilisation

Lyo-Ready Probe 1-Step Kit is specially formulated for ultra-sensitive detection of RNA using probe-based 1-step RT-qPCR and is ideal for the development of lyophilised diagnostic tests. Lyophilisation offers many advantages including ambient storage, extended shelf-life and increased versatility in sample volume. The kit has been optimised to offer the same high performance post-lyophilisation as our standard 1-step RT-qPCR kits.

Robust and reliable RT-qPCR

Lyo-Ready Probe 1-Step Kit includes a glycerol-free 4x qPCR mix containing hot start Taq polymerase, dNTPs, MgCl₂ and a blend of excipients to ensure reliable lyophilisation, without loss of activity. Antibody-mediated hot

start technology ensures specific amplification of virus-derived cDNA, with improved tolerance to the common PCR inhibitors found in clinical samples.

UltraScript Reverse Transcriptase is provided separately in a highly concentrated 3200x format, and enables fast and efficient reverse transcription up to 55 °C.

Customisable diagnostic assay development

Here at PCR Biosystems we understand that every molecular diagnostic assay is different and the process to lyophilise them can be challenging. We offer the Pre-Lyo Probe 1-Step Evaluation Kit for you to test on your assay. Please do not hesitate to contact us if you would like any technical advice.

Cat. No.	Product Name	Pack Size	Presentation
PB90.13-03	Pre-Lyo Probe 1-Step Evaluation Kit	600 Reactions	[3 x 1 mL mix] & [1 x 600 µL 20x UltraScript]
PB90.14-10	Lyo-Ready Probe 1-Step Kit	2000 Reactions	[2 x 5 mL mix] & [1 x 12.5 µL 3200x UltraScript]
PB90.14-50		10000 Reactions	[1 x 50 mL mix] & [1 x 62.5 µL 3200x UltraScript]
PB90.14-500		100000 Reactions	[1 x 500 mL mix] & [1 x 625 µL 3200x UltraScript]
PB90.02-03	Lyo-Ready Probe Mix	600 Reactions	3 x 1 mL
PB90.02-10		2000 Reactions	2 x 5 mL
PB90.02-50		10000 Reactions	1 x 50 mL
PB90.02-500		100000 Reactions	1 x 500 mL