



## Lyo Solutions

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Apto-Gen Lyo Solutions are a range of molecular reagents that are directly compatible with lyophilization. In lyophilized format, our reagents are stable at a wide range of temperatures which facilitates off-the-shelf rapid testing and eliminates cold-chain requirements, simplifying workflows and creating more environmentally sustainable products.

Our specialized technology enables users to lyophilize enzyme master mixes with their assay material without the need for additional excipients, and without compromising on performance. The Lyo Solutions product range is fully customizable and can be lyophilized *in situ* as pellets, or “picked and placed” as beads into a variety of reaction vessels.

Apto-Gen Lyo Solutions are designed for the most demanding molecular diagnostics and are ideally suited to clinical testing laboratories for sensitive and high-throughput testing of infectious and non-infectious human diseases.

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## Lyo PCR Master Mix

Lyo PCR Master Mix comprises a 2x master mix with highly sensitive hot-start Taq DNA polymerase. This ready-to-use master mix shows high PCR sensitivity and specificity and is optimized for the detection of low-copy number DNA targets.

Lyo PCR Master Mix can be lyophilized directly, without additional excipients, to produce ambient-temperature stable PCR mix. Lyophilized ('dry') Lyo PCR Master Mix shows the same PCR efficiency as the non-lyophilized ('wet') format (Figure 1).

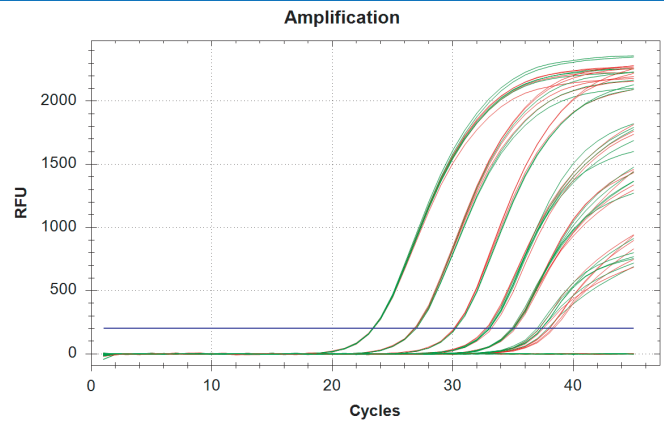


Figure 1. Consistent performance of Lyo PCR Master Mix pre- and post-lyophilization. qPCR amplification profile of *Streptococcus pneumoniae*: 'wet' Lyo PCR Master Mix II (red) and rehydrated lyophilized ('dry') Lyo PCR Master Mix II (green) show equal relative activity.

Pack code	Pack size*
401102.5	5 mL
401102.100	100 mL
401102.1000	10 x 100 mL

\*custom pack sizes and formats available on request

## Lyo RT-PCR Master Mix II

Lyo RT-PCR Master Mix II comprises a 2x master mix and 10,000x Reverse Transcriptase II. This ready-to-use master mix is directly compatible with lyophilization and is designed for the detection of low-abundance viral DNA and RNA targets direct from human patient samples.

Lyo RT-PCR Master Mix II shows superior sensitivity and RT-qPCR efficiency to other manufacturers' mixes on multiplexed molecular diagnostics tests (Figure 2).

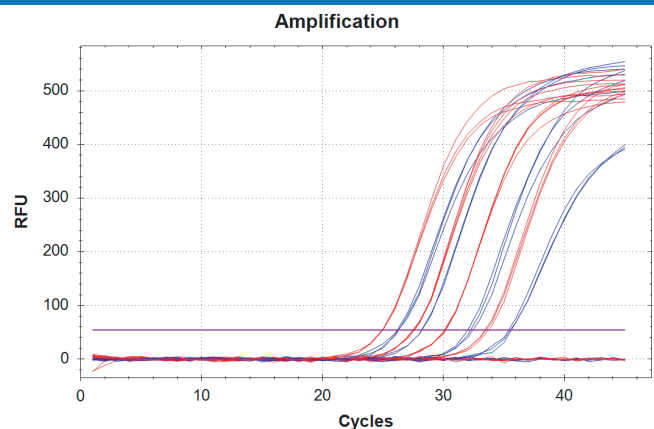


Figure 2. RT-qPCR amplification profiles of multiplexed human FLUAV and FLUBV targets. RT-qPCR amplification profile of FLUAV: Lyo RT-PCR Master Mix II (red) and Supplier T mix (blue) activity at four different serum sample quantities.

Pack code	Pack size*
801101.5	5 mL
801101.100	100 mL
801101.1000	10 x 100 mL

\*custom pack sizes and formats available on request

## Additional Lyo Solutions

<b>Lyo PCR Master Mix SF02</b>	701202.3A75	500 reactions
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Lyophilizable qPCR master mix supplied in separate format for user optimization

<b>Lyo RT-PCR Master Mix II SF02</b>	801207.3A75	500 reactions
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Lyophilizable RT-qPCR master mix supplied in separate format for user optimization

<b>Glycerol-Free HS Taq</b>	201200.A05	1,000 U
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20 U/μL glycerol-free hot-start Taq DNA polymerase, lyophilization compatible

<b>10,000x Reverse Transcriptase II</b>	331302.A002	1,000 U
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500 U/μL M-MLV reverse transcriptase, lyophilization compatible

<b>Glycerol-Free RNase Inhibitor</b>	101100.A05	2,000 U
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40 U/μL RNase inhibitor, lyophilization compatible

For more information about Apto-Gen and our products:  
[www.apto-gen.com](http://www.apto-gen.com) | [info@apto-gen.com](mailto:info@apto-gen.com)

London W14 0HP, United Kingdom

