XpressAmp™ Direct Amplification Reagents

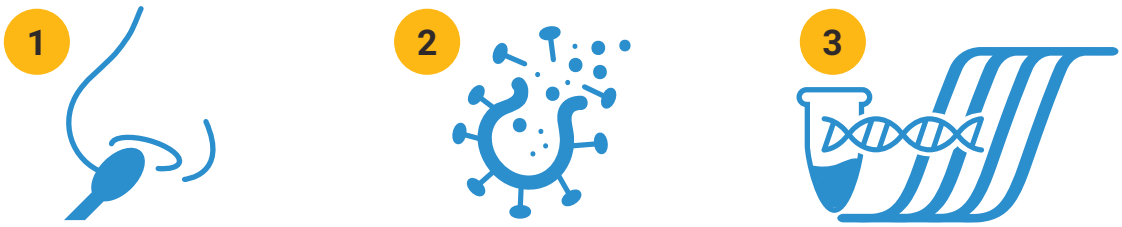
Rapid, Extraction-Free Viral Sample Preparation for RT-qPCR

The XpressAmp™ Direct Amplification Reagents provide a fast, extraction-free method to prepare samples for PCR-based amplification. The automation-friendly method prepares viral RNA from nasopharyngeal swabs with a simple, room-temperature incubation with lysis buffer. The lysed sample is then directly analyzed by RT-qPCR.

Benefits

- Rapid results with direct PCR amplification protocol
- Extraction-free preparation of viral samples for amplification
- Ten-minute, room temperature sample lysis
- Easily automatable for high-throughput needs

Simple, Extraction-Free Workflow



Collect and Store Sample
Use commonly available nasopharyngeal swabs stored in transport media.

Lyse Sample
Mix sample and XpressAmp™ Lysis Buffer (1:1). Incubate for 10 minutes at room temperature.

Amplify and Analyze
Add lysed sample to RT-qPCR containing XpressAmp™ Solution.

Figure 1. Workflow for the XpressAmp™ Direct Amplification Reagents.

Learn more about our customization options: **promega.com/CustomManufacturing**

Viral RNA Sample Preparation Without Extraction

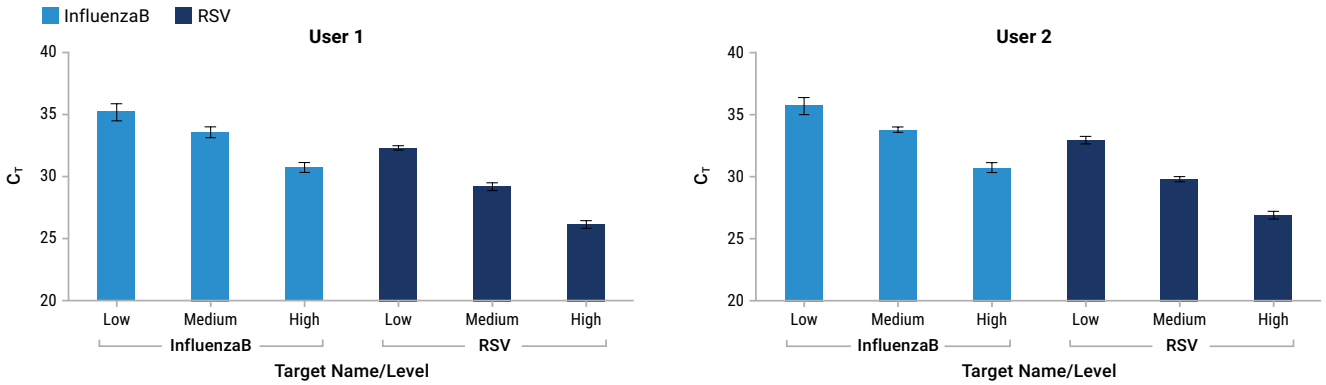


Figure 2. XpressAmp™ Detection of RNA from Inactivated Influenza/RSV Virus Pellet. Viral transport medium (VTM) was inoculated with a nasopharyngeal swab and spiked with RSV A and Influenza B (Hong Kong) virus reconstituted from Helix Elite™ Inactivated Standard, Inactivated Influenza A/B and Respiratory Syncytial Virus. This high virus sample (1×10^3 copies/µl) was diluted 1:10 and 1:100 in VTM to create the medium and low virus level samples. In parallel, two users created sample lysates from the spiked VTM samples using the XpressAmp™ Direct Amplification Reagents. Both users then detected the presence of RSV A and Influenza B by RT-qPCR using GoTaq® Probe 1-Step RT-qPCR System (Cat.# A6121) supplemented with the XpressAmp™ Solution. N=6 amplification replicates.

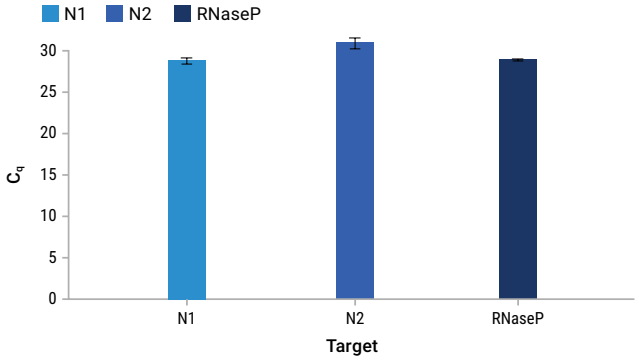


Figure 3. Amplification of Synthetic SARS-CoV-2 RNA from XpressAmp™ Lysates. Viral transport media (VTM) was inoculated with a nasopharyngeal swab and spiked with Synthetic SARS-CoV-2 RNA Control 2 (Twist Biosciences, Cat.# 102024, final concentration 1×10^4 copies/µl). Spiked VTM samples were then lysed by combining 5µl of sample with 5µl of prepared XpressAmp™ Lysis Buffer and incubated at room temperature for 10 minutes. Following incubation, 5µl of sample lysate was added to a monoplex GoTaq® Probe 1-Step RT-qPCR (25µl) containing XpressAmp™ Solution and amplified using the 2019 nCoV RUO kit (IDT, Cat.# 10006713) and thermal cycled according to the CDC protocol. N=8 amplification replicates.

To learn more, visit **promega.com/XpressAmp**

Ordering Information

Please contact your local Promega representative for product pricing and availability.

Product	Size	Cat.#
XpressAmp™ Direct Amplification Reagents	3,000 reactions	A8880
	250 reactions	A8882

For Laboratory Use. Outside of the United States, this product is intended for research use only unless otherwise stated.

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