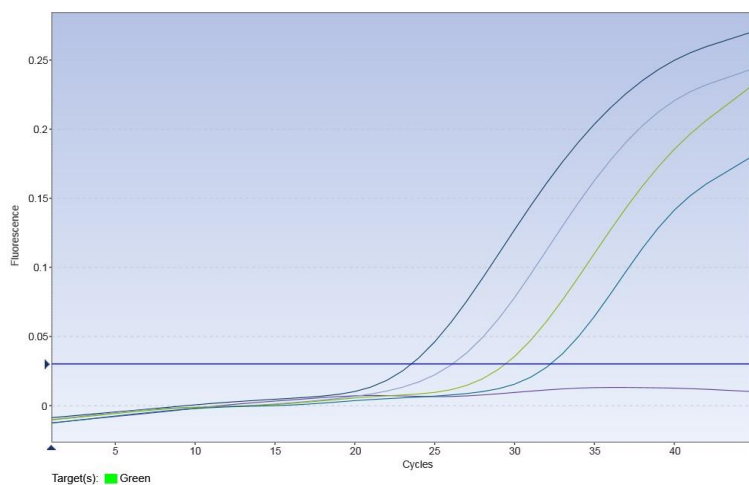


Technical Note – Viral Nucleic Acid

Automated Isolation of Viral DNA/RNA from Plasma, Serum, and Body Fluids

AutoGen offers different levels of automation to serve every laboratory's needs based on workflows and budget. Our XTRACT 16+ automated workflow along with the Viral Nucleic Acid Kit are optimized for isolating viral DNA and/or RNA from plasma, serum, and cell-free body fluids. A large volume (1.2 mL) extraction kit was developed to accommodate the small amount of nucleic acid in respect to volume.

- Quick, consistent and reproducible results.
- Convenient pre-filled and sealed cartridges.
- Minimal manual pipetting, complete automatic procedure from sample to cell lysis to elution.
- Isolate viral DNA and/or RNA from multiple sample types in the same run including plasma, serum, and cell-free body fluids.



HBV detection by real-time PCR

The eluates of HBV nucleic acid from samples containing various concentrations of HBV serums were subsequently detected by real-time PCR.

HBV Serums (pfu/mL)	Sample	Ct value
5×10^6	1	23.53
5×10^5	2	26.41
5×10^4	3	29.68
5×10^3	4	32.57

AutoGen XTRACT 16+

Total automated workflow for viral DNA and/or RNA extraction with XTRACT 16+.

Key Features

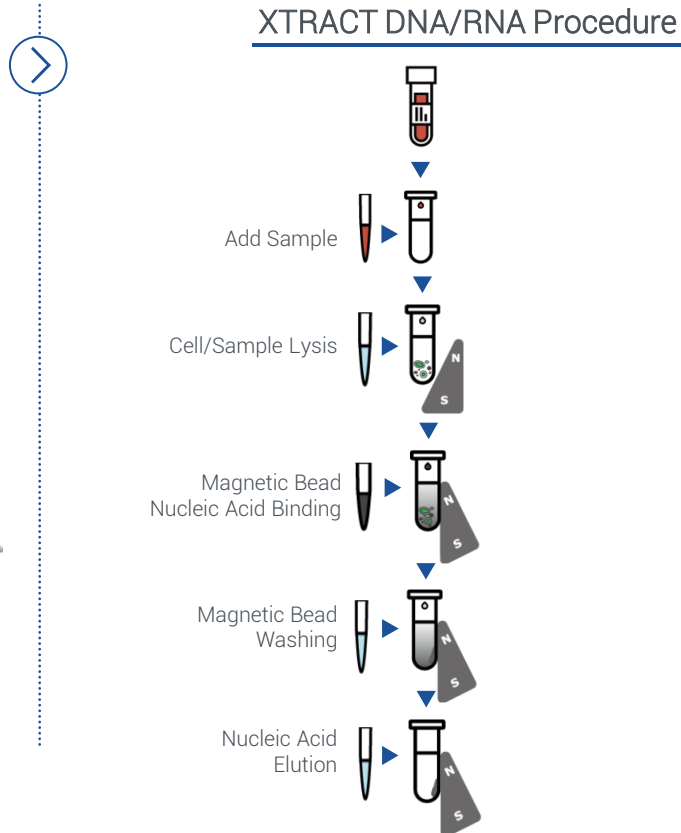
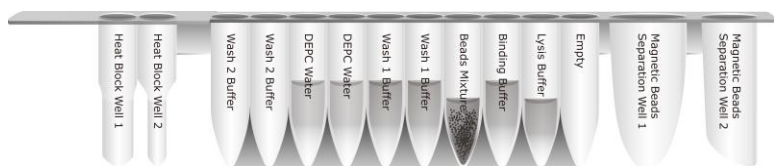
- Samples volumes up to 1.2 mL
- Low-medium throughput, 1-16 samples / run
- Bar code reading / sample tracking
- LIMS compatibility
- Archival quality DNA or RNA



Technical Note – Viral Nucleic Acid

XTRACT 16+ Principle and Procedure

The XTRACT method uses a pre-filled cartridge containing proteinase K and chaotropic salt to lyse cells and degrade protein. Viral DNA and/or RNA will bind to the cellulose coated magnetic beads. After washing off the contaminants, the purified viral DNA/RNA is eluted by low salt elution buffer. Using magnetic-particle technology to purify viral DNA/RNA from up to 1.2 mL of serum, plasma or cell-free body fluids, the purified viral DNA/RNA can be used directly for downstream applications.



Ordering Information and Kit Performance

PRODUCT #	PRODUCT NAME	SAMPLE SIZE	PROCESSING TIME
XK203-96	XTRACT Viral Nucleic Acid Extraction Kit (High Sensitivity)	200-400 µl	60-82 minutes
XK211-96	XTRACT Viral Nucleic Acid Large Volume Extraction Kit (1.2mL)	1.2 mL	90 minutes
XK210-96	XTRACT Viral Nucleic Acid Large Volume Extraction Kit (2.4mL)	2.4 mL	90 minutes

AutoGen's promise is to provide the most practical, economically effective solutions for your sample prep and automation extraction solution needs, and to do it with a level of service, support, and responsiveness that leads the industry.