



# Xceler8™ Solution

Rapid, automated  
nucleic acid extraction

# Advancing human health through innovation



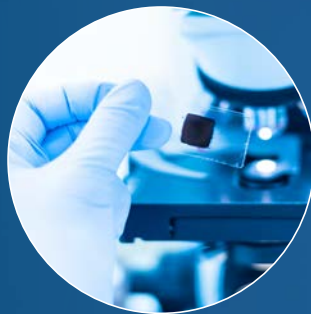
## Xceler8™ Solution

*Simple, fast, efficient.*

A versatile molecular platform that effectively automates nucleic acid extraction and purification without all the fuss.



- Increase productivity
- Simple automation



- Reproducible results
- Stackup to scale



- Minimize human error
- Rapid run times



- Efficient workflow
- Random access

## The Xceler8™ Platform

The integrated Xceler8 Solution for automated nucleic acid extraction and purification is a cutting-edge molecular platform that is both accessible and best in class. Comprising of an instrument, ready-to-use Cartridge Kits and a touchscreen tablet with our proprietary X8 App, the Xceler8 Platform is intuitively designed for full process automation. The versatile Xceler8 Solution enables **beyond simple** nucleic acid extraction from a variety of biological samples for a wide range of research as well as clinical applications.



## Breakthrough Technology

The disruptive Xceler8 Technology significantly expedites and seamlessly integrates the process of nucleic acid extraction and purification. Unlike typical commercial spin-column or magnetic-bead technologies, the automated Xceler8 Technology uses a novel four-step chemistry-based approach to purify nucleic acids, making it the first of its kind to facilitate a **truly walk-away solution**.

## Technology

The diagram illustrates the Xceler8 Technology process, showing the input of various biological samples and the first two steps of the process: Cell lysis and Selective binding.

**Sample**


**1 Cell lysis**


**2 Selective binding**

The diagram shows a pipette adding sample to a cartridge. The sample is then processed through the cartridge, which contains a lysis buffer and a binding matrix. The process is shown in two stages: 1. Cell lysis, where the sample is broken down into human cells, bacteria, and viruses. 2. Selective binding, where the nucleic acids are bound to the matrix.

## X8 OneTouch Instrument

Experience freedom from sample batching with the random-access feature on the X8 OneTouch. By automating the X8 Cartridge Kits, the X8 OneTouch efficiently extracts nucleic acids up to 8 samples at a time, setting new standards for reproducibility & user-friendliness.


 **Versatile workflow.** Gain unparalleled flexibility with the ability to run any sample at any time, instantaneously.


 **Compact footprint & low noise.** Function with safety, ease & low noise, whether on a standard benchtop or within the confines of a biosafety cabinet.

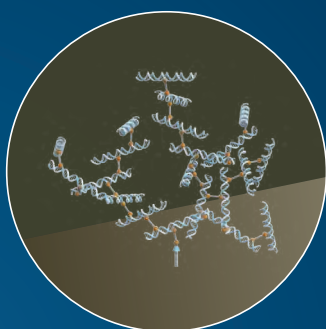
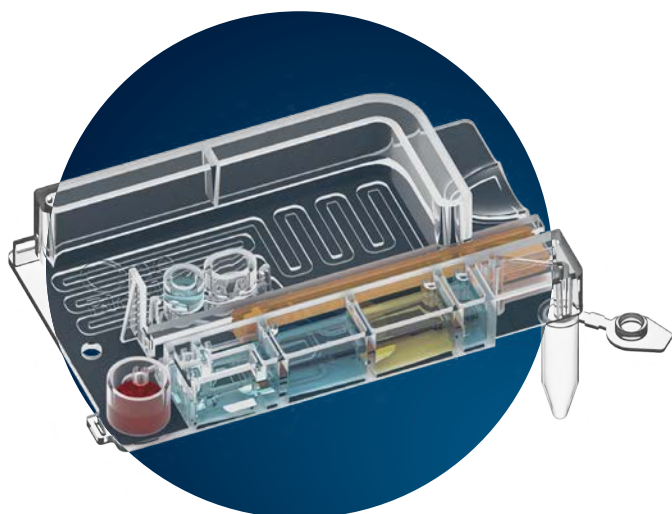


## X8 Cartridge Kits

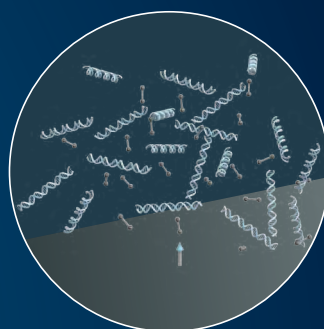
Easily purify high-quality DNA or RNA from a myriad of biological samples for a wide variety of downstream applications. Rapidly automate your sample preparation process by choosing the kit suitable to your workflow.

 **Ready-to-use.** Conveniently process samples with pre-filled, sealed cartridge kits with all-inclusive reagents, including Proteinase K.

 **Simple handling.** Enjoy hassle-free shipping & storage at room temperature with non-volatile and ethanol-free cartridge kits.

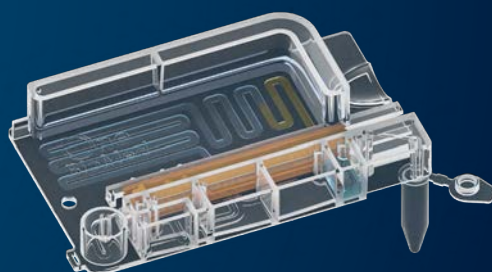
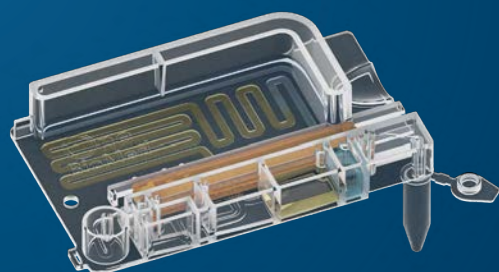


**3** Wash away impurities



**4** Elute

After cell lysis, the reversible crosslinker selectively binds & clusters the released nucleic acids on to the cartridge. Once impurities are washed away & sealed in a built-in waste reservoir, the purified nucleic acids are eluted.



  
**Purified Nucleic Acids**

**X8**

## SOLUTION HIGHLIGHTS



### Turnkey solution.

Plug-and-play instrument with minimal routine maintenance.



### Rapid workflow.

Run samples in as little as 30 minutes without sample batching.



### Simple operation.

Ensure high nucleic acid extraction performance from a myriad of sample types with the push of a button.



### Reliable cleaning.

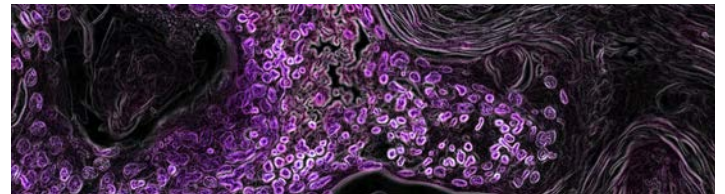
Simplify clean up & minimize cross-contamination with the fully sealed cartridge architecture with built-in waste reservoir.



### Scale up with stacking.

Increase throughput by stacking X8 OneTouch Instruments.

## Cancer research



- Study gene expression changes
- Identify cancer driver genes

## Infectious diseases



- Detect the presence of pathogens
- Elucidate antibiotic resistance

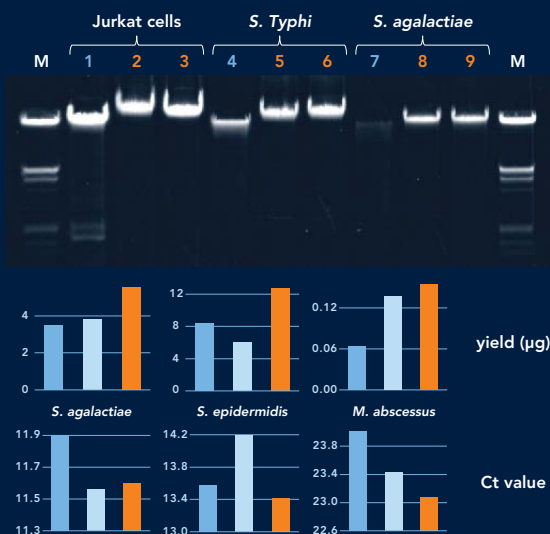
## Genetic disorders



- Classify variants of interest
- Analyze gene mutations

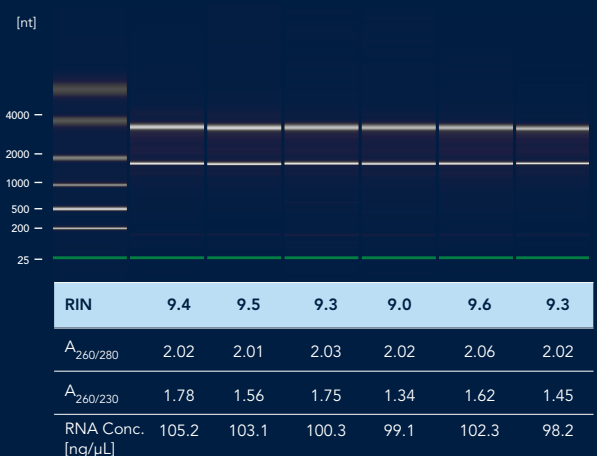
## High yield & reproducible performance with the X8 Genomic DNA & RNA Cartridge Kits

### High yield



company Q  
company P  
X8

### Reproducible performance



T: Reproducible RNA extraction performance across 6 samples of 1 x 10<sup>6</sup> HeLa cells each using X8 Cellular RNA Cartridge Kit. The quality of the total RNA was determined with the Agilent 2100 Bioanalyzer and Nanodrop. Elution vol. 80-90 µL.

T: Agarose gel analysis of purified DNA from cell culture, gram- & gram+ bacteria. B: Quantified DNA yield & RT-PCR data from gram+ bacteria.

## Cartridge Kits, 24 preps

DNA	Catalog number
X8 Genomic DNA Kit	X8-GD-001-24
X8 Tissue DNA Kit	X8-TD-001-24

RNA	Catalog number
X8 Cellular RNA Kit	X8-CR-001-24
X8 Tissue RNA Kit	X8-RT-001-24
X8 Viral RNA Kit	X8-VR-001-24

## Instruments

Nucleic Acid Extraction	Catalog number
X8 OneTouch	X8-OT-101-IN



### Contact us

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