# X8<sup>™</sup> Tissue DNA Cartridge Kit

For use with Xceler8<sup>™</sup> Platform







Advancing human health through innovation

One BioMed

## X8<sup>™</sup>Tissue DNA Cartridge Kit

#### Rapid, efficient and beyond simple.

Our proprietary chemistry and integrated cartridge architecture rapidly automates the extraction of highquality DNA from fresh or frozen mammalian tissue and Gram-positive bacterial samples.

The ready-to-use X8 Cartridge Kits include all necessary reagents for high-quality DNA extraction, including proteinase K. The lysis buffer has been optimized to maximize genomic DNA yield, thereby ensuring the purified DNA is suitable for various downstream applications. The X8 Cartridge Kits are also non-volatile and ethanol-free, making them easy to ship and store at room temperature.



#### **PLATFORM HIGHLIGHTS**



**Simple operation.** Get high quality and quanitity of tissue DNA at the push of a button.

**Versatile workflow.** Gain unparalleled flexibility with random-access sample loading.



**Rapid instrument run-time.** Run up to 8 samples under an hour, without sample batching.



**Ready-to-use.** Easily process samples in cartridges, packed with all essential reagents.



**Reliable cleaning.** Minimize clean up & cross-contamination with fully closed architecture and built-in waste reservoir.



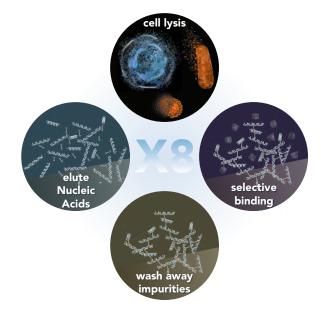
**Sample information.** Input amount 10-30 mg of tissue and elution volume is 50-200 µL.

## Powered by Xceler8<sup>™</sup> Technology

#### Breakthrough Technology

Unlike typical commercial spin-column or magneticbead technologies, the disruptive Xceler8 Technology significantly expedites and seamlessly automates the process of DNA extraction from fresh or frozen tissue and Gram-positive bacterial samples.

The novel chemistry-based approach uses a reversible cross-linker to selectively bind & cluster DNA from the lysed tissue samples on to the surface of the cartridge. Once impurities are washed away & sealed in the built-in waste reservoir, the purified DNA is released and eluted using an elution buffer. The purified DNA is suitable for various downstream applications.

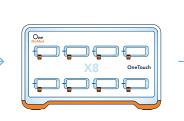


## X8 Workflow

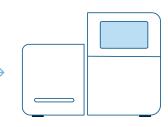
#### Fit seamlessly into your existing workflow

Use the automated X8 Platform to get consistent and reproducible nucleic acid extraction from fresh or frozen mammalian tissue samples, as well as Gram-positive samples.





automated nucleic acid extraction



downstream application e.g., Next-Gen Sequencing

## **Comparative performance of X8 Tissue DNA Cartridge Kit**

SAMPLE TYPE	TISSUE INPUT	SAMPLE	CT VALUE	YIELD (QUBIT) (ng/µL)	A (260/280)
Rat Tail	20-30 mg	Company Q X8-1 X8-2	28.02 27.46 28.14	22.1 47.1 24.1	1.88 1.89 1.84
Rat Liver	10-20 mg	Company Q X8-1 X8-2	27.86 25.00 25.67	121.9 137.8 151.4	1.99 1.87 1.83
Rat Heart	30-40 mg	Company Q X8-1 X8-2	29.91 28.20 27.73	22.6 38.4 94.8	1.88 1.79 1.75
Rat Lung	15-20 mg	Company Q X8-1 X8-2	26.82 25.75 27.42	29.0 193.0 388.0	1.96 1.73 1.71

## High gDNA yield with X8 Tissue DNA Cartridge Kit



**Figure 1.** Genomic DNA was isolated from frozen Rat Tail, Liver, Heart and Lung tissue respectively, using a manual kit from Company Q and replicates of automated X8 Tissue DNA Cartridge Kit. The purified gDNA was analyzed on 0.8% agarose gel and stained with a fluorescent dye. M= DNA molecular weight marker.

### **Xceler8 Products**

	INSTRUMENT	CATALOG NO.
	X8 OneTouch Instrument	X8-OT-101-IN
	CARTRIDGE KITS, 24 PREPS	CATALOG NO.
DNA	X8 HMW DNA Kit	X8-HD-001-24
	X8 Genomic DNA Kit	X8-GD-001-24
	X8 Tissue DNA Kit	X8-TD-001-24
	X8 Cellular RNA Kit	X8-CR-001-24
RNA	X8 Tissue RNA Kit	X8-RT-001-24
	X8 Viral RNA Kit	X8-VR-001-24

## **Research Areas**

- Cancer research
- Genetic disorders
- Genotyping

# **Application Areas**

- Genomic Sequencing
- Polymerase Chain Reaction
- Agarose Gel Electrophoresis

#### **Contact us**

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