# Allspin™

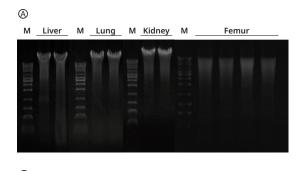
# Your Sample is Precious— Make the Most of it with Allspin™: Simultaneous DNA and RNA Extraction from the same cell or tissue sample

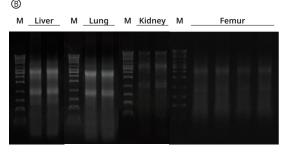
The Allspin<sup>™</sup> is designed to purify high-quality genomic DNA and total RNA **simultaneously from a single biological sample**—no need to split or waste precious material. With optimized protocols, Allspin<sup>™</sup> enables parallel purification of both DNA and RNA, ensuring maximum yields and integrity for both nucleic acids. Purified DNA and RNA are eluted separately and ready for immediate use in a wide range of downstream applications, including qPCR, sequencing, and gene expression analysis.

By extracting both analytes from a single sample, Allspin<sup>™</sup> also enhances data consistency across multi-omics workflows—an essential advantage for integrative studies such as WES, transcriptomics, and proteogenomics.

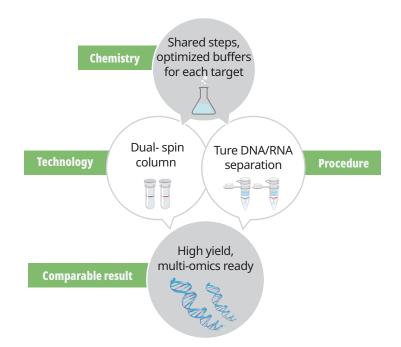
Allspin™ is the smart choice for researchers who demand efficiency, high yield, and reliability—all from a single sample.

#### Simultaneous Extraction of DNA and RNA



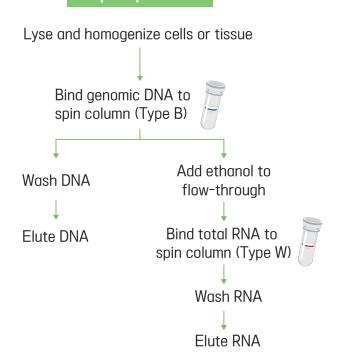


Genomic DNA and total RNA were extracted from various mouse tissue samples, including decayed femur-a challenging hard tissue- using Allspin™. Extracted DNA(③) and RNA(⑤) samples were analyzed on agarose gel.
M: 1 kb DNA ladder





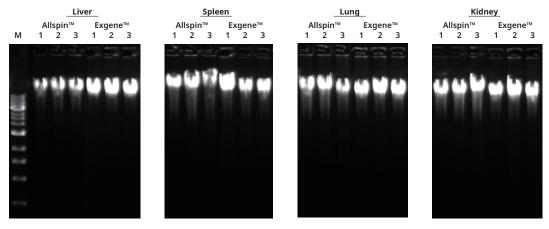
# Allspin™ procedure



#### Typical DNA/RNA yield

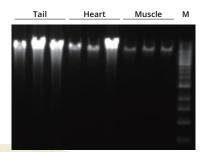
Materials	Sample type	Yield of genomic DNA	Yield of Total RNA
Cultured cell (≒ 1 x 10 <sup>6</sup> )	CHO RAW 264.7	~7 μg ~10 μg	~ 15 μg ~ 20 μg
Tissue (rat) (10 mg / prep)	Liver Kidney Brain Heart Spleen	~ 25 µg ~ 25 µg ~ 12 µg ~ 10 µg ~ 70 µg	~ 60 µg ~ 30 µg ~ 10 µg ~ 9 µg ~ 80 µg

# Comparison of DNA quality: Allspin™ vs dedicated tissue DNA extraction kit



Genomic DNA extracted from Liver, Spleen, Lung and Kidney samples using the Allspin $^{\text{TM}}$  and Exgene $^{\text{TM}}$  Tissue SV mini. Samples analyzed on a agarose gel, showing comparable gDNA quality to those obtained with dedicated tissue DNA extraction kits.

#### Integrity DNA Extraction from Hard-to-Lyse Mouse Tissues



Genomic DNA was extracted from difficult-to-lyse tissues such as tail, heart, and skeletal muscle using Allspin $^{\text{TM}}$ . Despite the dense structure and high protein content of these tissues, the clear bands on the agarose gel indicate efficient lysis and preservation of DNA integrity.

### Ordering information

Allspin™

Cat. No.: 306-150

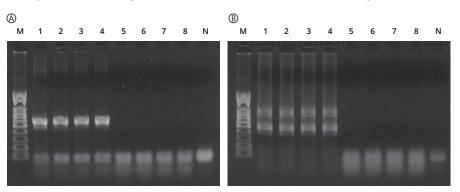
Size: 50 prep

Type: Spin

# High-quality RNA from tissues

Rat tissue	RIN value	
Liver	10.0	
Kidney	9.7	
Brain	10.0	
Heart	9.8	

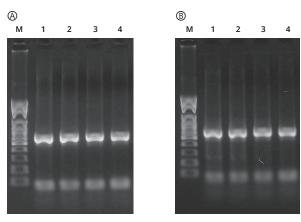
# Comparative Analysis of DNA/RNA Extraction Purity



Genomic DNA and total RNA were extracted from  $CHO(\circledast)$  and  $RAW(\circledast)$  cells using Allspin<sup>m</sup> or Supplier A kit. PCR amplification was successfully performed on the extracted DNA samples, confirming DNA presence. No amplification was observed from total RNA samples, indicating that the RNA extraction were free of genomic DNA contamination.

Lane 1, 2: Genomic DNA eluate from Allspin™
Lane 3, 4: Genomic DNA eluate from Supplier A
Lane 5, 6: Total RNA eluate from Allspin™
Lane 7, 8: Total RNA eluate from Supplier A
M: 100 bp ladder, Lane N: Negative control

# RT-PCR Analysis of Total RNA



Total RNA was extracted from rat brain(®) and heart(®) tissues using the Allspin™ or Supplier A kit, followed by RT-PCR. The RT-PCR bands confirm successful RNA extraction without detectable genomic

DNA contamination Lane 1, 2: PCR of cDNA from Allspin™ Lane 3, 4: PCR of cDNA from Supplier A

M: 100 bp ladder

