

Automated nucleic acid isolation fulfilling biobanking needs.

Biobanking applications, biospecimen repositories and microbiome research projects are facing demanding and diverse sample materials like whole blood, FFPE tissue to feces material in all kind of sample volumes and conditions. To fulfill the needs of sensitive genetic research applications such as whole genome sequencing, real time/digital PCR, and methylation analysis etc., the extraction of high quality and high yield nucleic acids is an essential initial step, especially when it comes to long-term storage of the extracted DNA/RNA samples as required in biobanking.

Revvity offers the perfect solutions for this challenge by providing

Key features

- Sample volumes from 10 µL - 10 mL
- High throughput
- LIMS compatible log files, barcode reading

- Automated nucleic acid isolation, highly flexible in sample volume (10 µL - 10 mL), sample material and throughput
- Huge variety of processable sample materials (blood, buffy coat, saliva, tissue, feces, etc.)
- Maximum yields and best purities (up to 50 µg DNA/mL blood; OD_{A260/A280} 1.9; OD_{A260/A230} >2.0)
- Long term stable nucleic acids

Benefits

- Ready to use DNA/RNA – up to 50 µg DNA/mL blood
- Compact benchtop design
- Integrates with liquid handling systems

| Max. yields from diverse sample types

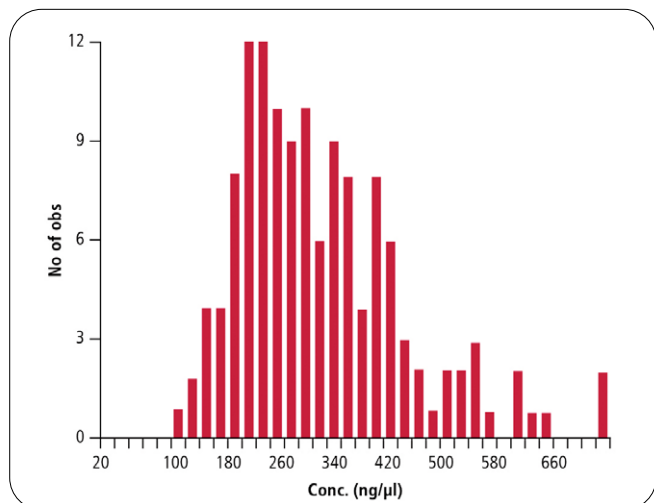
Sample type	Typical yield
Blood (per mL)	20-50 µg (DNA) 2-7 µg (RNA)
Buffy coat (per mL blood)	5-40 µg (DNA)
Saliva (per mL)	5-40 µg (DNA)
Dried blood spot (per 3-6 mm punchout)	0.5-2 µg (DNA)
Amniotic fluid (per ml)	0.5-3 µg/mL (DNA)
Cells (per 1.2 x 10 ⁷ cells)	100-200 µg (DNA)
Buccal swab (per swab)	1-3 µg/swab (DNA)
Tissue (per 10 mg)	15-40 µg (DNA) 1-8 µg (RNA)

chemagic™ 360 nucleic acid extractor



For research use only. Not for use in diagnostic procedures.
US: For laboratory use only. Not intended for use in diagnostic procedures.





DNA concentration of 133 extractions from 4 mL whole blood, elution vol. 500 μ L. Mean conc.: 314 ng/ μ L, mean yield: 157 μ g

Genomic DNA isolation from ≤ 7 mL human blood (with chemagic DNA Blood Kit CMG-715), elution volume = 500 μ L

Achieving high average yields: 63 μ g/mL blood, DNA concentration: 346,6 ng/ μ L \pm 163,01 High DNA quality: $A_{260}/A_{260} = 1,98\pm 0,26$

> 2,500 DNA extractions per year

> 200 runs per year



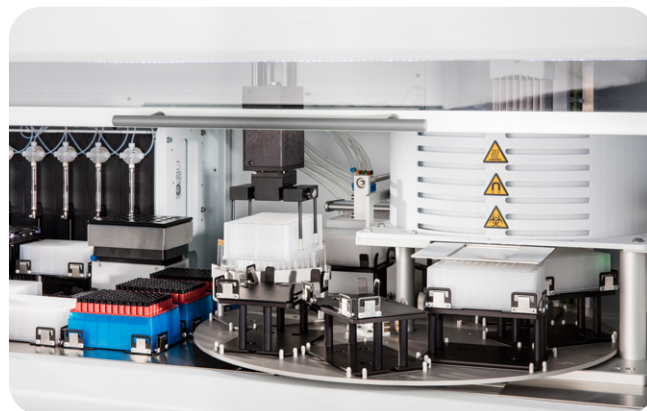
Customer results of Biobank HCB-IDIBAPS, Barcelona, Spain, Blood and Fluid Bank, Veronica Fernandez Pascual, PhD

Your tool for DNA/RNA isolation workflows in biobanking

Based on your automation needs Revvity offers full workflow solutions covering high throughput DNA/RNA isolation, liquid handling robotics, nucleic acid quality control and analysis, optimized for Biobanking and Biorepository demands. All from a single-source Revvity delivers Biobanking application support from DNA to Data.

Automation solutions

- High throughput primary sample transfer and DNA/RNA Isolation
- Optional: normalization, PCR setup applications, eluate transfer into storage formats
- Numerous sample tube and plate formats for primary sample input and eluate output
- Barcode sample and eluate tracking for seamless integration to LIMS systems, sample security and storage solutions



chemagic Prime instrument with a chemagic 360 unit and a Janus liquid handling unit for automated nucleic acid extraction and assay setup.

For more information please visit www.revvity.com

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