

sparQ Lysis Kit

High-quality, high molecular weight gDNA extraction from DBS for high-throughput workflows

FEATURES & BENEFITS:

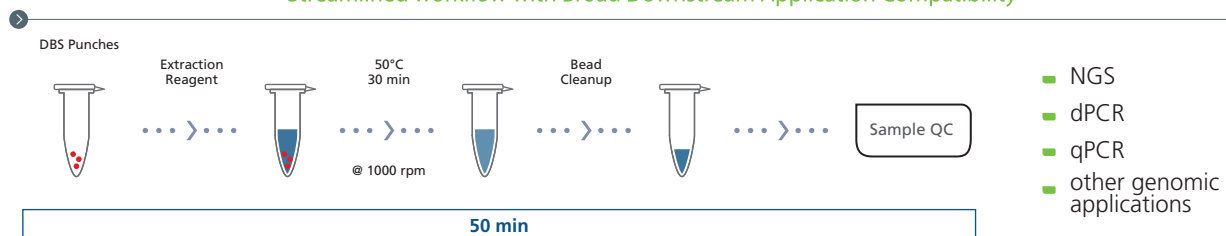
- **Rapid workflow:** Extract high-quality gDNA in 50 minutes, saving time and increasing lab efficiency
- **High molecular weight gDNA:** Yields intact genomic DNA (>50 kb) ideal for long-read sequencing
- **Versatile sample compatibility:** one kit supports a broad range of sample types, including DBS, whole blood, saliva
- **Broad application use:** delivers DNA ready for NGS (short and long-read), qPCR, dPCR, and other genomic workflows
- **Automation-ready:** compatible with high-throughput and automated platforms for effortless scalability

DESCRIPTION:

The sparQ Lysis Kit offers a fast and efficient method for extracting high-molecular-weight genomic DNA (>50 kb) from a variety of sample types, including dried blood spots (DBS), whole blood, and saliva—in just 50 minutes. Designed for both manual and automated platforms, this streamlined workflow delivers consistent, high-yield results and is optimized for high-throughput processing.

As a key component of the sparQ DBS-seq workflow, the sparQ Lysis Kit enables the extraction of high-quality gDNA for next-generation sequencing (NGS), as well as qPCR, dPCR, and other genomic applications – even from limited sample input.

Streamlined workflow with Broad Downstream Application Compatibility



sparQ Lysis Kit workflow. The efficient protocol enables extraction of high-quality, high-molecular-weight gDNA in just 50 minutes from DBS punches. The workflow is simple, automation-friendly, and delivers DNA suitable for NGS, qPCR, dPCR and other genomic applications.

gDNA Extraction from Diverse Sample Types

High-quality gDNA is consistently obtained across a range of sample types -- including DBS, whole blood, saliva, and cheek swab - supporting broad applicability in molecular workflows.

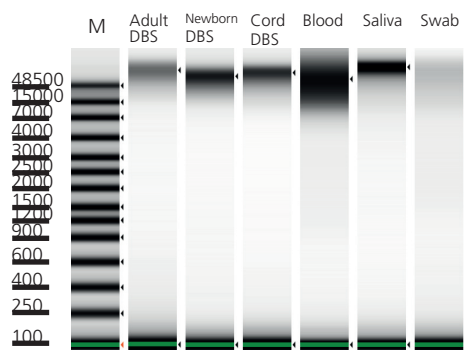


Figure 1 High-quality gDNA extracted from diverse sample types. Samples tested included three 3.2 mm punches of dried blood spots (DBS) collected from adult, newborn, and cord blood; 200 ul of whole adult blood; 400 ul of stabilized saliva; and 400 ul of stabilized cheek swab. The presence of distinct, high molecular weight bands indicates intact, high-purity DNA suitable for downstream molecular analyses.

Maximized Yield from Minimized Input

Efficient extraction delivers high gDNA yield from limited number of dried blood spot (DBS) punches. Achieve robust performance with minimal sample input - ideal for sensitive downstream applications.

High gDNA Yield from DBS Samples

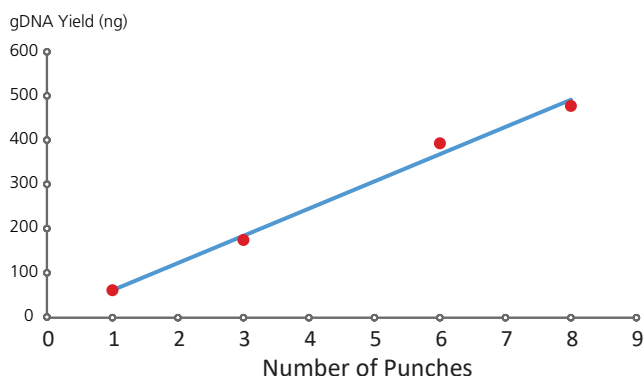


Figure 2 gDNA yield correlated with the number of DBS punches. Three punches yielded an average of 175 ng of gDNA, suitable for PCR-free whole genome library prep. Additional punches can increase yield for applications that demands higher input.

ORDER INFO

Product Name	Quantabio Catalog Number	Size
sparQ Lysis Kit, 24R	95220-024	24 rxns
sparQ Lysis Kit, 96R	95220-096	96 rxns
Related Products		
sparQ DNA Frag & Library Prep Kit, 24R	95194-024	24 rxns
sparQ DNA Frag & Library Prep Kit, 24R	95194-096	96 rxns
sparQ PureMag Beads - 5 ml	95196-005	5 ml
sparQ PureMag Beads - 60 ml	95196-060	60 ml
sparQ PureMag Beads - 450 ml	95196-450	450 ml
sparQ UDI Adapters (1-96)	95211-096	96 xns
sparQ Universal Library Quant Kit - 100 R	95210-100	100 rxns
sparQ Universal Library Quant Kit - 500 R	95210-500	500 rxns

Quantabio products are intended for molecular biology applications. The products are not intended for the diagnosis, prevention or treatment of a disease.
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