

NiXTips[®]

Product Guide

DPX offers innovative technology for fast and effective genomic sample preparation.

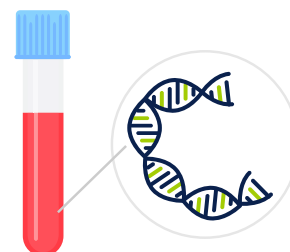
NiXTips Powered by MicroPorous Xtraction (MPX) Technology

MPX technology for genomic sample preparation utilizes proprietary silica media within functionalized pipette tips (NiXTips) to facilitate methods for DNA extraction from biological samples and for PCR cleanup or size selection.

- Eliminate need for ancillary equipment
- No DNA shearing
- Pure sample ready for RT-PCR, NGS and other downstream applications

Purification

- Cell Cultures
- Whole Blood
- Saliva



Cleanup

- PCR cleanup
- Size selection
- Double-side size selection



Next Generation Sequencing & Analysis

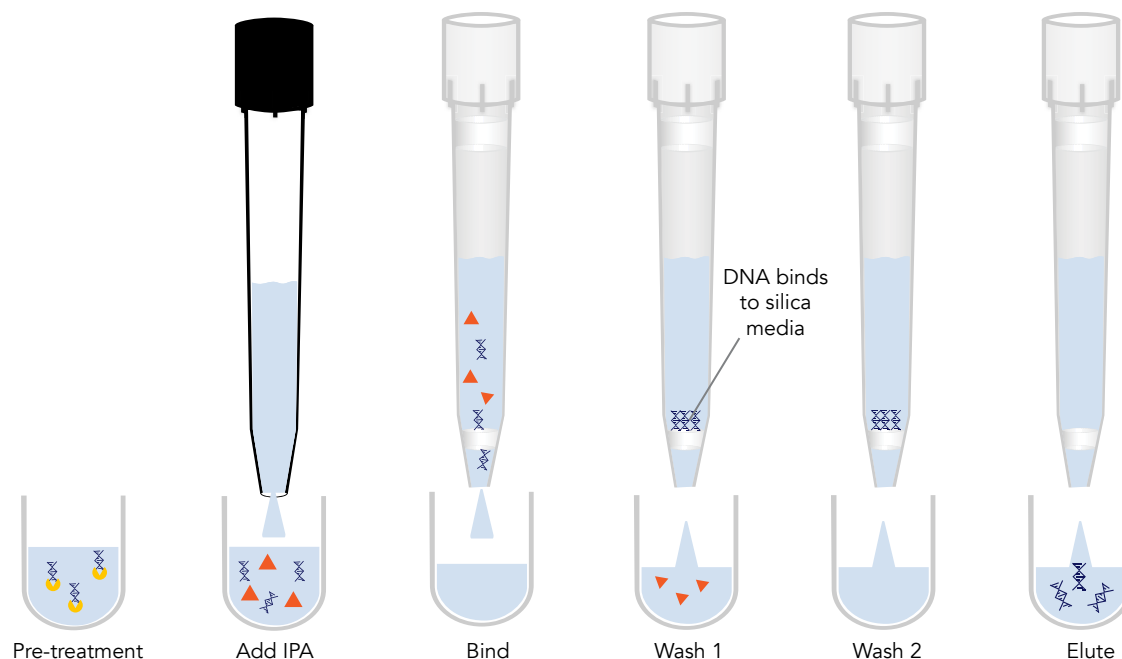
50 μ L Hamilton
CO-RE II Format
NiXTips shown
here



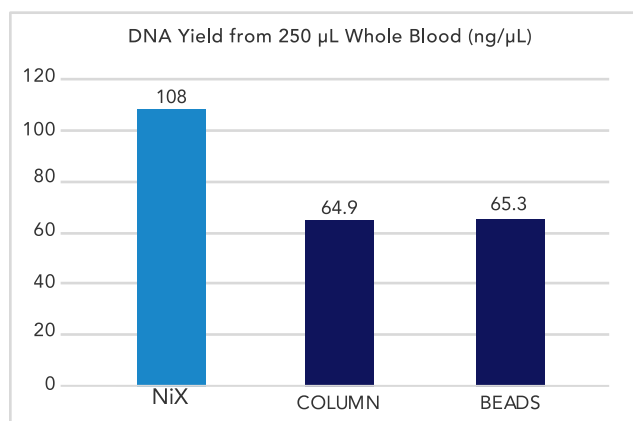
Delivering Purification Excellence

INTip nucleic acid purification and cleanup methods with simple BIND-WASH-ELUTE protocols.

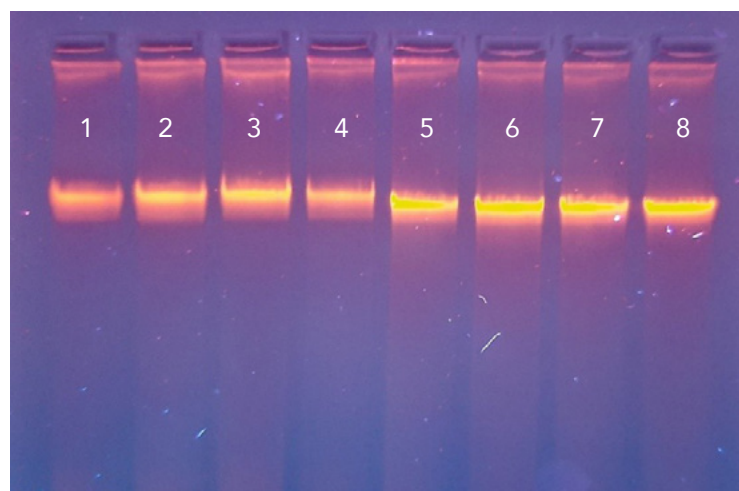
NiX Methods: Purification



Example protocol for DNA extraction from biological samples. DPX methods result in high yields up to 43 μg genomic DNA depending on sample type, sample volume, and tip format.



Direct comparison of average DNA yields from 250 μL of blood with DPX method for isolation using 1 mL NiXTips versus the leading bead-based and column-based competitor kits.

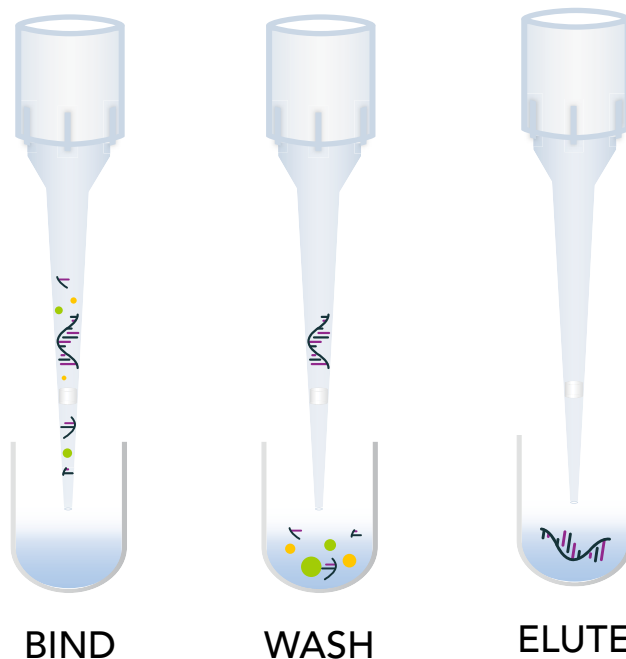


Agarose gel (1%) of 4 replicates of genomic DNA purified by a commercial magnetic bead protocol (lanes 1-4) or the NiXTips automated protocol (lanes 5-8).

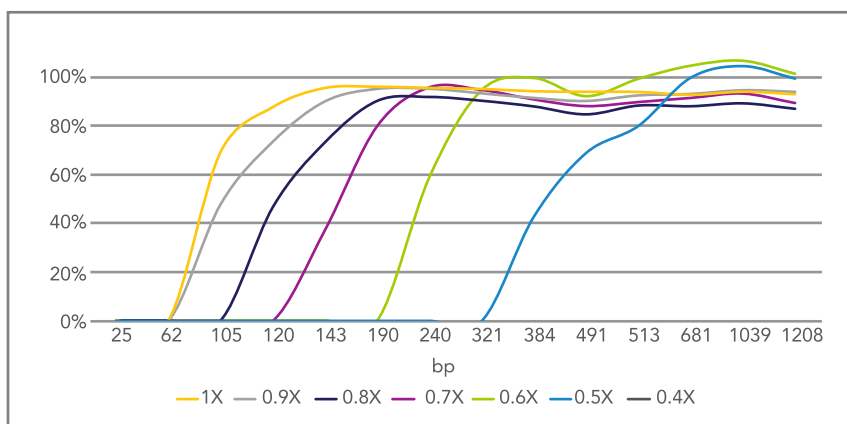
NiX Methods: Cleanup

PCR Cleanup & Size Selection

Solid Phase Reversible Immobilization (SPRI) is commonly used for purifying and size selecting nucleic acids. NiXTip's proprietary microporous media and buffer system allows for fast and effective removal of primers, primer-dimers, dNTPs, unincorporated labeled nucleotides, enzymes, and salts from PCR and other reaction mixtures.

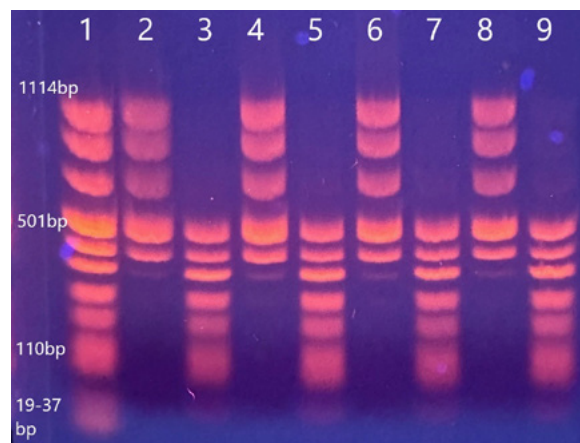


Left Side Size Selection



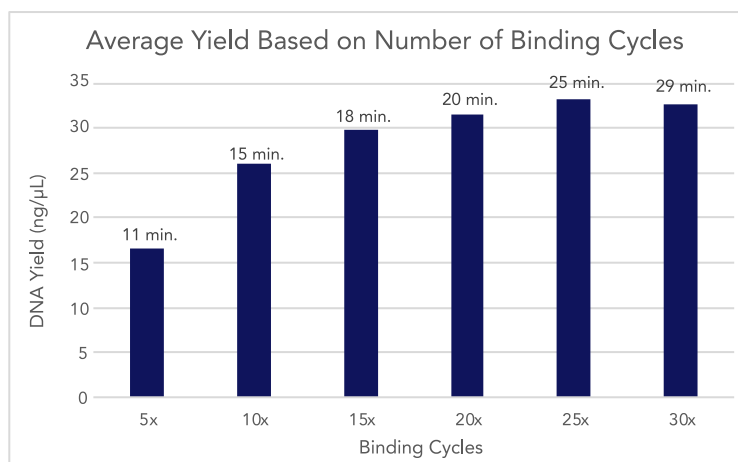
Percent recovery of DNA fragments at different binding buffer to sample ratios using 50 µL NiXTip format. Size selection may be impacted by master mix and tip format.

Quality Assurance



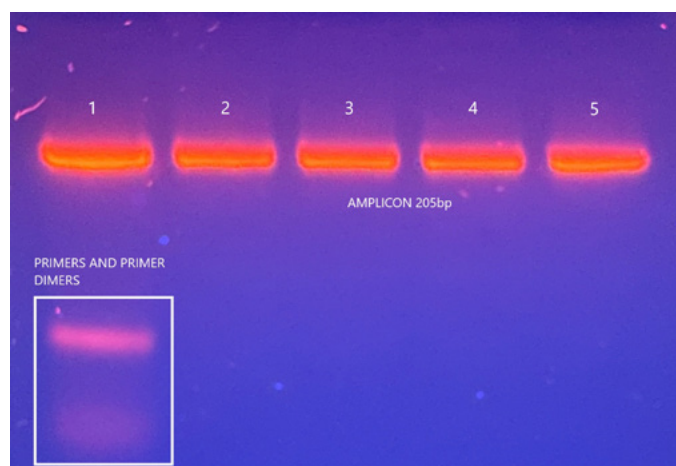
Gel electrophoresis of double-sided size selection using NiXTips. Lane 1 is DNA MWM VIII. Lanes 2, 4, 6, and 8 show DNA fragments bound to the NiXTip at 0.5X binding buffer to sample ratio. Lanes 3, 5, 7, and 9 show DNA fragments bound to a second NiXTip when the same samples are brought up to 0.8X binding buffer to sample ratio.

Average Yield



Recovery of DNA MWM VIII in ng/μL with different (5, 10, 15, 20, 25, 30) aspirate/dispense cycles (binding cycles).

Quality Assurance



Gel electrophoresis of PCR products before (lane 1) and after NiXTip cleanup (lanes 2-5).

How to Order

NiXTips Applications

NiXTips are compatible with major liquid handling robotic platforms. NiXTips are sold in matrix-specific kits for DNA extraction and prep kits for cleanup methods, including necessary buffers. Contact us for custom method development for applications not listed.

- DNA Isolation from Cell Culture
- DNA Isolation from Whole Blood
- DNA Isolation from Saliva
- PCR Cleanup, Library Prep., Size Selection



Hamilton format kit shown here.

HAMILTON

INTEGRA

Agilent Technologies

TECAN

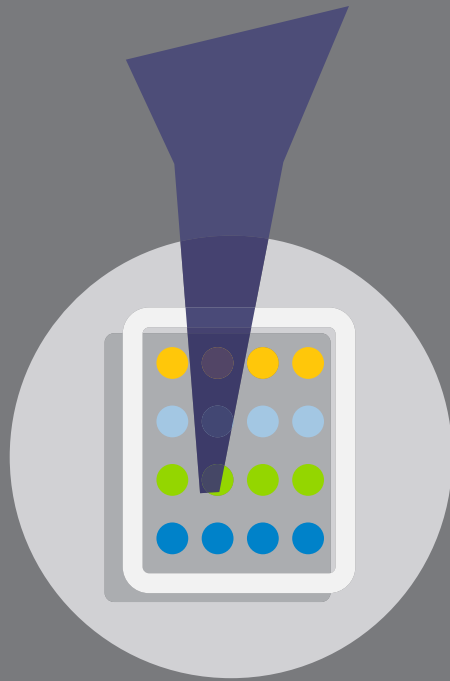
Tip Size	Application
50 μL 96 tips/rack	●
300 μL 96 tips/rack	● ● ●
1 mL 96 tips/rack	● ● ●

Tip Size	Application
125 μL 384 tips/box	● ● ●
300 μL* 384 tips/box	● ● ●
1250 μL* 384 tips/box	● ● ●

Tip Size	Application
70 μL 384 tips/box	●

Tip Size	Application
200 μL* 384 tips/box	● ● ●

*Coming Soon!



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