

PCR Product Purification: Competitive Comparison of JETQUICK 'PCR', Qiaquick 'PCR', Nucleospin 'PCR', and Geneclean with spin option

Specification	JETQUICK	Qiaquick	Nucleospin (MN)	Geneclean + Spin Option
Technology	Spin procedure	Spin procedure	Spin procedure	Silica Batch Procedure
Type of matrix	Silica membrane	Silica membrane	Silica membrane	Crushed glass; variable size
Handling of Silica Matrix	Convenient	Convenient	Convenient	Inconvenient***
Time needed per preparation	5 - 10 min	5 - 10 min	5 - 10 min	20 - 25 min
Sodium iodide used?	no	no	n.d.	yes**
Range of fragment sizes	50 bp - 20 kb	70 bp - 10 kb	300 bp - 5 kb	200 bp - 20 kb*
Capacity per prep	≥ 20 µg	10 µg	10 µg	5 µg
DNA Quality	highly pure	highly pure	highly pure	pure
DNA suitable for:				
Sequencing	yes	yes	yes	variable
Restriction/Ligation	yes	yes	yes	variable
PCR	yes	yes	yes	variable

* = higher fragment sizes only with Geneclean II and III. Geneclean can only purify fragments from 500 bp up to 5 kb.

** = Sodium Iodide is difficult to remove from DNA samples and may affect downstream applications.

*** = Only in the GeneClean III kit the matrix is relatively easy to resuspend. GeneClean and GeneClean II require vigorous vortexing in order to achieve a homogeneous suspension.