

Selection Guide for PowerPrep™ HP Plasmid Purification Kits

Performance Characteristics		
	PowerPrep™ HP Plasmid Purification Kits	PowerPrep™ Express Plasmid Purification Kits
Technique	Mini, midi and maxipreps use gravity flow. Mega and gigapreps use vacuum-assisted cartridges	Minipreps are compatible with vacuum and centrifugation protocols
Plasmid Size and Copy Number	Works well even with large constructs such as BACs up to 150-200 kb	Works well for high copy number plasmids and cosmids up to 45 kb
Analytical Purity	> 2X CsCl; A 260/280 >1.85	A 260/280 >1.80
Process Time	2-3 hours	20-25 minutes
Transfection Efficiency	Better than or equal to that obtained with DNA purified by 2X CsCl methods, even for difficult cell lines such as Huh 7	Works well for standard cell lines such as COS and K562
Recovery	90-95%	85-95%

Capacity	PowerPrep™ HP Plasmid Purification Kits		PowerPrep™ Express Plasmid Purification Kits	
	High Copy Number	Low Copy Number	High Copy Number	Low Copy Number
MINI	≥ 30 µg from 1-3 ml of culture	2-15 µg from 10-15 ml of culture	≥ 40 µg from 1-5 ml of culture	Not recommended
MIDI	≥ 150 µg from 15-25 ml of culture	5-100 µg from 25-100 ml of culture	NA	NA
MAXI	≥ 750 µg from 100 ml of culture	50-500 µg from 250-500 ml of culture	300-500 µg from 100 ml of culture	Not recommended
MEGA	≥ 2.5 mg from 500 ml of culture	2.5 mg from 2.5 liters of culture	NA	NA
GIGA	≥ 10 mg from 2.5 liters of culture	5 mg from 5 liters of culture	NA	NA

Selection Guide for PowerPrep™ Express PCR Purification Kits

	Spin Cartridges	96-Well Systems
Capacity	20 µg of dsDNA per spin cartridge	5 µg of dsDNA per well
Process Time	< 10 minutes per cartridge	As little as 15 minutes per plate
Format	Vacuum or Centrifugation	Vacuum or Centrifugation

Selection Guide for PowerPrep™ Gel Extraction Kits

	Express Gel Extraction System	Matrix Gel Extraction System
Technology	Solubilization of gel & adsorption to silica membranes in spin cartridges	Solubilization of gel & adsorption to loose silica resin using a scalable protocol
Capacity	15 µg of dsDNA per spin cartridge	10 µg of dsDNA per 10 µl of loose resin
Yield	Up to 95%: decreases with size > 3 kb	Up to 95%
Fragment Size	50 bp to 10 kb	50 bp to 50 kb
Format	Vacuum or Centrifugation	Centrifugation

