



ZYMO RESEARCH
The Beauty of Science is to Make Things Simple

Plasmid Purification Reinvented



Create Something Extraordinary

Highest Customer Satisfaction.

Unforgettable Experiences.

I loved the ease and rapidity, and that you can use a vacuum! I really was imagining this would be another copy-cat kit with no real benefit, but I was really surprised.



W. G.-B. (Massachusetts General Hospital)
ZymoPURE™ Plasmid Kit User



This kit is superior to the [Supplier Q] kit in speed of preparation, amount of plasmid recovered and fewer (and easier) protocol steps.

R.K. (University of Alabama at Birmingham)
ZymoPURE™ Plasmid Kit User

"...Overall, the kit is **really easy to use, quick** and the **yield was the best I have ever gotten** in a midi."

H. H. (MIT), *ZymoPURE™ Plasmid Kit User*

"Fast, efficient purification, good with elution of concentrated DNA thanks to a different spin column design, fewer buffers and fewer steps than in other miniprep protocols, all buffers prepared and ready to use straight out of the package, good price. Please don't change anything, the kit works great."

S.K. (Lund University), *Zyppy® Plasmid Kit User*

"It's so FAST! And it works!! I can't think of a way to improve this product. My big problem with it is that it is SO fast that I don't have time to label my tubes!"

A.F. (Fairfield University), *Zyppy® Plasmid Kit User*

Plasmid Purification Reinvented

Empower your research with ZymoPURE™ and Zyppy® plasmid DNA purification kits. Streamlined methodology and superior technology enables unrivaled speed and performance. At the core of the ZymoPURE™ technology is a novel binding chemistry and membrane that redefines plasmid purity, reduces processing time by 7 fold, and enables > 1 mg of plasmid DNA to be eluted directly from a microcentrifuge column. Zyppy™ technology has simplified workflows with a patented pellet-free direct-lysis procedure that eliminates the need for centrifugation which simplifies automation and high throughput applications.



Plasmid DNA Purification

From *E. coli*

From Yeast

Miniprep Scale

ZymoPURE™ Plasmid Miniprep Kit

≤ 100 µg transfection-grade plasmid DNA.

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Zyppy® Plasmid Miniprep Kits

Pellet-free, high-quality plasmid DNA in only 8 minutes.

page 6 - 7

Midiprep, Maxiprep, and Gigaprep

ZymoPURE™ II Plasmid Prep Kits

Vaccine/transfection grade plasmid DNA in ≤ 20 minutes.

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ZymoPURE-Express™ Plasmid Midiprep Kit

Pellet-free isolation of transfection grade plasmid DNA in only 15 minutes.

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BAC, YAC, PAC Plasmid DNA ~200 kb

ZymoPURE™ Plasmid Miniprep Kit & ZymoPURE™ II Plasmid Midi, Maxi, & Gigaprep Kits

Quickly isolate large constructs (~200 kb) using a spin-column.

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High-Throughput

Zyppy®-96 Plasmid Magbead Kit

Pellet-free procedure for high-quality plasmid DNA (no centrifugation).

page 8

Zyppy®-96 Plasmid Miniprep Kit

Pellet-free procedure for high-quality plasmid DNA.

page 7

Zymoprep™ Yeast Plasmid Miniprep Kits

Simple solution for yeast plasmid DNA isolation using Zymolyase.

page 9



Endless possibilities, **what will you create?**

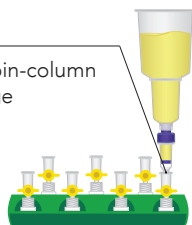
ZymoPURE™ II Plasmid Purification Kits

- **Fastest:** Simple 20 minute Midi/Maxi preps.
- **Highest Yield:** 6x more plasmid.
- **Ultra-Pure:** EndoZero™, vaccine grade*, and transfection ready.

Simple 20 minute EndoZero™ Midi/Maxi preps

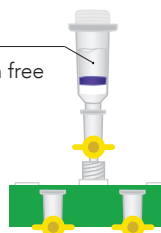
bind

rapid loading onto a spin-column
via vacuum or centrifuge



wash

for ultra-pure endotoxin free
plasmid DNA



elute

transfection ready
from spin-column

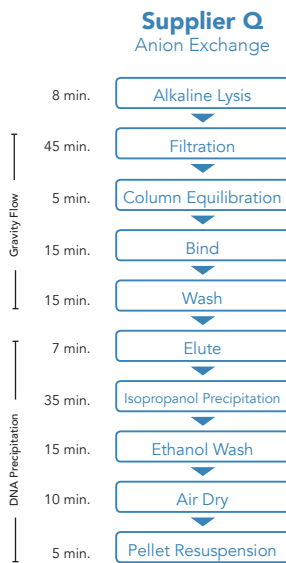


Highest Yield & Lowest Elution Volume



ZymoPURE™ II is plasmid purification reimagined. At the core of our ZymoPURE™ II technology is a novel binding chemistry and membrane that redefines plasmid purity, reduces processing time 7 fold, and enables >1 mg of plasmid to be eluted from a microcentrifuge column.

EndoZero™ Plasmid DNA in 5 Easy Steps

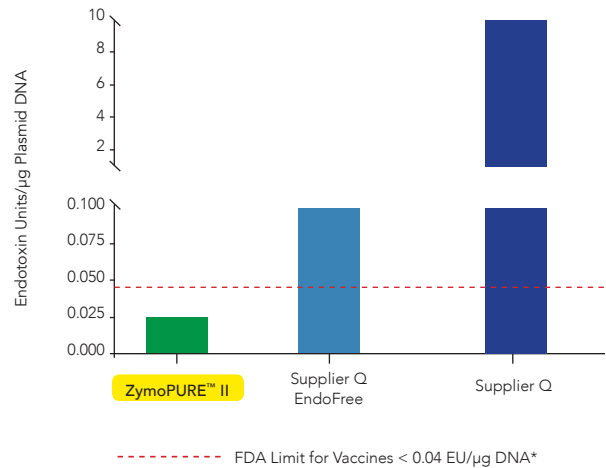


Plasmid DNA in **160 minutes**



Plasmid DNA in **18 minutes**

Ultra-Pure Vaccine Grade Plasmid DNA



Stated manufacturers' endotoxin levels for the ZymoPURE™ II Maxiprep kit compared to two separate kits from Supplier Q.

* Endotoxins <math>< 0.04\text{ EU}/\mu\text{g}</math> of plasmid DNA meets the FDA limit for vaccines.

Product	Cat. No.	Size	Processing Time	Culture Volume	Elution Volume	Plasmid Yield	Endotoxins
ZymoPURE™ II Plasmid Midiprep Kit	D4200 D4201	25 preps 50 preps	≤ 20 minutes	≤ 50 ml	≥ 100 μl	≤ 400 μg	≤ 0.025 EU/μg
ZymoPURE™ II Plasmid Maxiprep Kit	D4202 D4203	10 preps 20 preps	≤ 20 minutes	≤ 150 ml	≥ 200 μl	≤ 1.2 mg	≤ 0.025 EU/μg
ZymoPURE™ II Plasmid Gigaprep Kit	D4204	5 preps	≤ 50 minutes	≤ 2.5 L	≥ 2 ml	≤ 10 mg	≤ 0.025 EU/μg

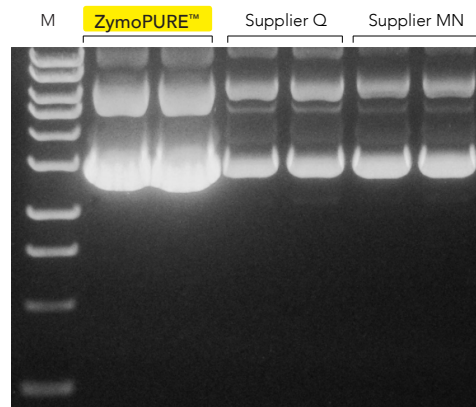
**BAC/YAC/PAC Ready: Purify DNA up to ~200 kb.

ZymoPURE™ Plasmid Miniprep Kit

- **Highest Yield:** Purify up to 100 µg of plasmid DNA in as little as 25 µl directly from a spin-column.
- **Transfection-Grade:** 50,000 times fewer endotoxins than industry leading minipreps.
- **BAC/YAC/PAC Ready:** Purify DNA up to ~200 kb.

Superior Yields

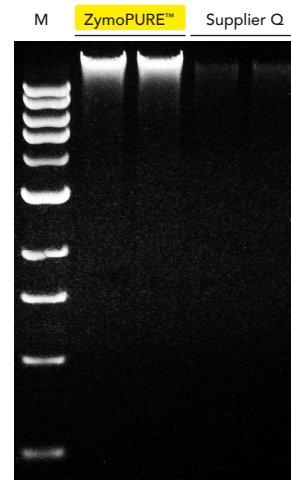
Plasmid DNA yield and concentration from the ZymoPure™ Miniprep Kit compared to other major suppliers. Plasmid DNA (pGL3®) was isolated from 5 ml of JM109 *E. coli* culture grown overnight following the manufacturer's suggested protocol (in duplicate). The size marker "M" is a 1 kb ladder.



Transfection-grade



BAC/YAC/PAC Ready



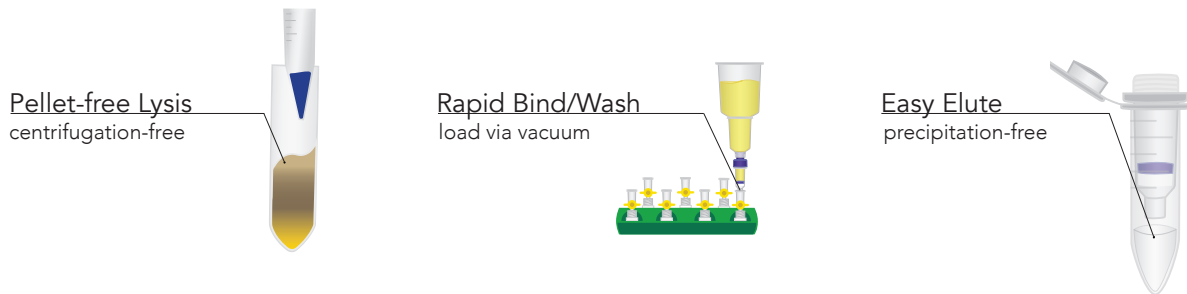
BAC DNA yield and concentration from the ZymoPURE™ Miniprep Kit compared a Supplier Q kit. A BAC clone (~190 kb) from a RPC1-11 human BAC library (CHORI) was purified from 5 ml of DH10B *E. coli* cultures grown in duplicate overnight following the manufacturer's suggested protocol. The size marker "M" is a 1 kb ladder.

Product	Cat. No.	Size	Processing Time	Culture Volume	Elution Volume	Plasmid Yield	Endotoxins
ZymoPURE™ Plasmid Miniprep Kit	D4208T	10 preps	≤ 15 minutes	≤ 5 ml	≥ 25 µl	≤ 100 µg	≤ 1 EU/µg DNA
	D4209	50 preps					
	D4210	100 preps					
	D4211	400 preps					
	D4212	800 preps					

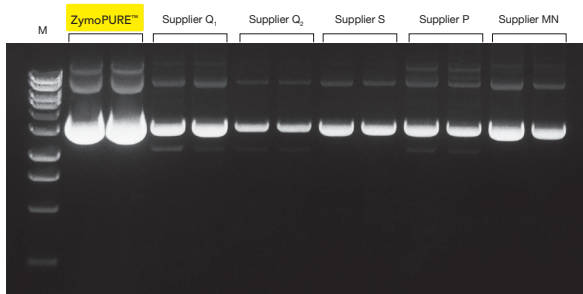
ZymoPURE-Express™ Plasmid Midiprep Kit

- **Pellet-Free:** Direct lysis procedure omits cell-pelleting, resuspension steps, and large centrifuges.
- **Quick & Pure:** 15 minutes from culture flask to transfection-grade plasmid DNA.
- **Highest Yield:** Purify up to 1.2 mg of plasmid DNA using a spin-column.

15 minutes from Culture to Plasmid DNA
(No large-scale centrifugation)

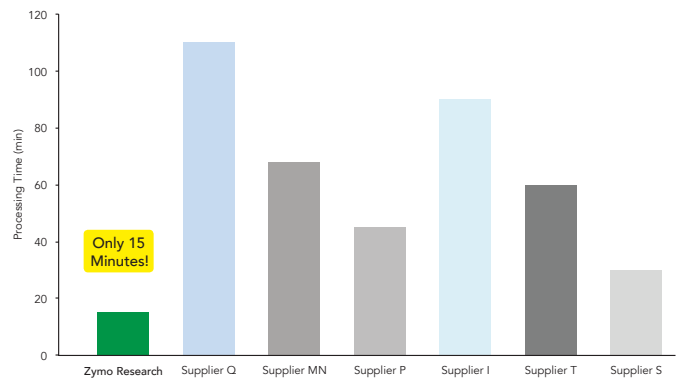


Superior Yield



Plasmid DNA yield and concentration from the ZymoPURE-Express™ Midiprep Kit compared to other major suppliers. Plasmid DNA (pGL3[®]) was isolated from 25 ml of JM109 *E. coli* culture grown overnight following the manufacturer's suggested protocol in duplicate. The eluted plasmid DNA was visualized post agarose gel electrophoresis. The size marker "M" is a 1 kb ladder.

Fastest Plasmid Midiprep



Save up to 100 minutes with the ZymoPURE-Express™ Midiprep Kit.

Product	Cat. No.	Size	Processing Time	Culture Volume	Elution Volume	Plasmid Yield	Endotoxins
ZymoPURE-Express™ Plasmid Midiprep Kit	D4213	25 preps	≤ 15 minutes	25 ml	≥ 200 µl	≤ 1.2 mg	≤ 1 EU/µg DNA

Zyppy® Plasmid Purification Kits

imagine...
plasmid DNA **directly from culture**



1. Add lysis buffer directly
to bacterial culture



2. Neutralize



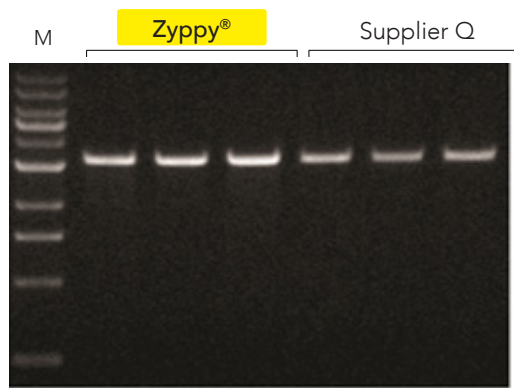
3. Bind, Wash, Elute

Pellet-free, high-quality plasmid DNA in 8 minutes

No Pelleting. No Resuspension.

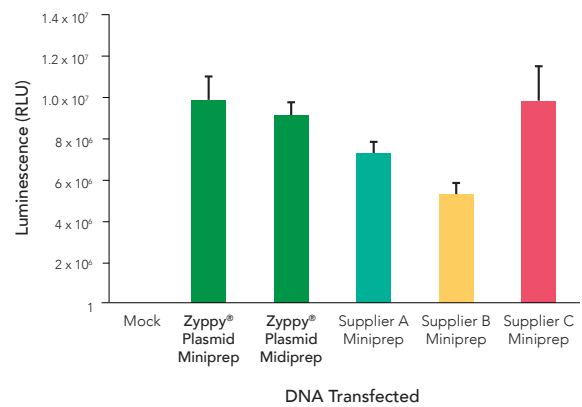
- **Fastest:** 8 minutes from culture flask to high-quality plasmid DNA.
- **Pellet-Free:** Direct lysis procedure omits cell-pelleting and resuspension steps.
- **High Quality:** Plasmid DNA is ready for PCR, sequencing, cloning, and transfection.

Superior Yield



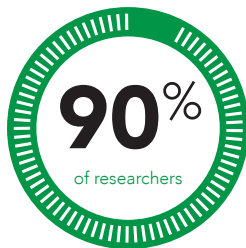
EcoRI digestion of plasmid DNA (pGEM®) isolated from *E. coli* culture using the Zyppy® Plasmid Miniprep Kit or the similar kit from Supplier Q. The amount of DNA loaded was standardized based on culture volume input. Performed in triplicate. The size marker "M" is a 1 kb ladder.

Transfection Ready

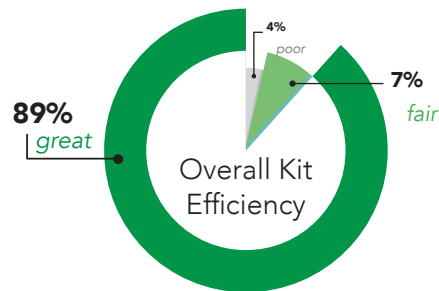


Luciferase activity was measured in lysates from cells transfected with DNA that was extracted using the pellet-free (Zyppy® system) or non-pellet-free (suppliers A, B, and C) formats. The luciferase activity is indicated as relative light units (RLU).

Proven Performance



would recommend
this kit to another researcher



Product	Cat. No.	Size	Processing Time	Culture Volume	Elution Volume	Plasmid Yield	Endotoxins
Zyppy® Plasmid Miniprep Kit	D4036	50 preps	≤ 8 minutes	600 µl – 3 ml	≥ 30 µl	≤ 25 µg	≤ 50 EU/µg DNA
	D4019	100 preps					
	D4020	400 preps					
	D4037	800 preps					
Zyppy®-96 Plasmid Miniprep Kit	D4041	2 x 96 preps	≤ 45 minutes	750 µl	≥ 30 µl	≤ 5 µg	≤ 50 EU/µg DNA
	D4042	4 x 96 preps					
	D4043	8 x 96 preps					

Automated Zyppy® Plasmid Purification

- **Pellet-Free:** Rapid direct lysis procedure omits cell-pelleting and resuspension steps.
- **High Quality:** Ready for PCR, sequencing, cloning, and transfection.
- **Ideal for Synthetic Biology:** Fastest, high-throughput automated method for preparing high-quality plasmid DNA.

Pellet-Free Workflow



1. Add lysis buffer directly to bacterial culture



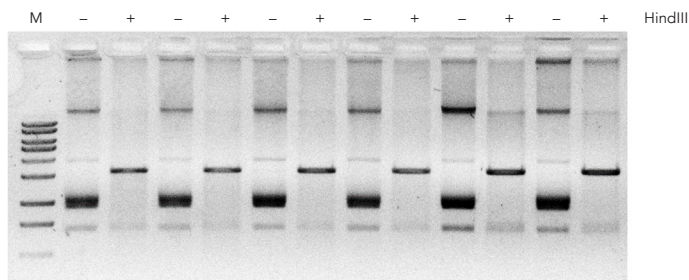
2. Neutralize



3. Beads remove debris without centrifugation

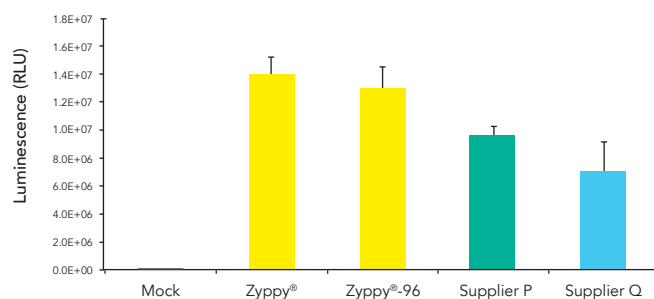
Workflow exemplary of automated procedure: Lysis buffer is added directly to *E. coli* culture with no centrifugation or pelleting necessary. MagClearing Beads are added following neutralization to remove cell debris resulting in a cleared supernatant.

High-Quality Plasmid DNA



Plasmid DNA (pGEM-3Zf(+)) was purified then digested with HindIII for one hour at 37°C. Both undigested (– lanes) and digested (+ lanes) samples were separated in a 1.0% agarose gel. The undigested samples show supercoiled plasmid, while the digested samples show the expected single linearized 3,197 bp fragment. The size marker “M” is a 1 kb ladder.

High Transfection Efficiency



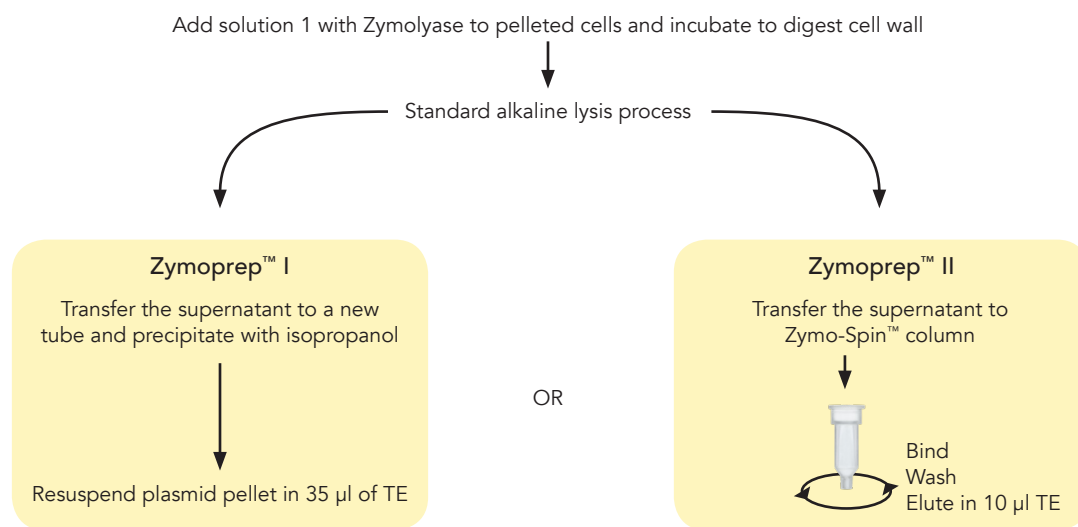
Plasmid DNA isolated with Zyppy® show the highest transfection efficiencies. Luciferase activity was measured in lysates from cells transfected with plasmid DNA extracted using the Zyppy® Plasmid Miniprep Kit or products from Suppliers P and Q. The luciferase activity is indicated as relative light units (RLU).

Product	Cat. No.	Size	Processing Time	Culture Volume	Elution Volume	Plasmid Yield	Endotoxins
Zyppy®-96 Plasmid MagBead Miniprep Kit	D4100	2 x 96 preps	≤ 60 minutes	750 µl	≥ 30 µl	≤ 5 µg	≤ 50 EU/µg DNA
	D4101	4 x 96 preps					
	D4102	8 x 96 preps					



Zymoprep™ Yeast Plasmid Miniprep Kits

- **Simple:** Quickly and easily rescue plasmid from yeast.
- **Efficient Isolation:** Works well with low copy and hard-to-isolate plasmids.
- **High-Quality:** Isolated plasmid DNA is ideal for molecular biology techniques, such as PCR, transformation, hybridization, etc.



Product	Cat. No.	Size	Processing Time	Culture Volume	Elution Volume	Plasmid Yield
Zymoprep™ Yeast Plasmid Miniprep I	D2001	100 preps	≤ 30 minutes	≤ 1.5 ml	N/A	0.01 - 0.3 ng
Zymoprep™ Yeast Plasmid Miniprep II	D2004	50 preps	≤ 25 minutes	≤ 1.5 ml	≥ 10 µl	0.01 - 0.3 ng
Zymoprep™-96 Yeast Plasmid Miniprep	D2005 D2006 D2007	2 x 96 preps 4 x 96 preps 8 x 96 preps	≤ 60 minutes	≤ 1.5 ml	≥ 10 µl	0.01 - 0.3 ng



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