

Automated Large Scale Plasmid Prep

Maxiprep | Megaprep | Gigaprep



AutoPlasmid MMG by PhyNexus

Get purified plasmids within hours in your lab. No more waiting for costly outsourcing.

Fully Automated Plasmid Prep

Automation provides process repeatability, precision, reliability, and consistent results. The AutoPlasmid MMG is the industry's first and only fully-automated plasmid purification instrument capable of Maxiprep, Megaprep, and Gigaprep scale plasmid purification.

Transfection Grade Plasmids

It only takes about 5-10 minutes hands-on time to set up the instrument, pour in the prepared sample, hit start, and walk away. Come back at the end of the run, and your transfection grade plasmids are waiting for you—No vacuums and no centrifugation.

Mega, Maxi or Gigaprep Scale

Sometimes you need more, sometimes less, so the AutoPlasmid MMG can do whatever you need—not the other way around. Prepare and run up to four Maxi or Megapreps or two Gigapreps with a one time set up.

Take Control of Your Lab

Stop overpaying for outsourcing or performing tedious manual plasmid preps in-house, and start doing what's important.

Improve Your Lab

- **Increased Productivity**
Lab professionals can be deployed to more productive and more valuable tasks
- **Significant Cost Benefits**
Only 1/3 the cost of outsourcing while maintaining comparable costs to manual kits
- **Save Time, Improve Workflow**
Purified plasmids in hours, not days or weeks from outsourcing, keeps the pace of research timely
- **Control & Protect Your IP**
Maintain chain of control of your IP throughout the process
- **Better Sample Quality**
Improved process repeatability, precision, and reliability
- **Easy to Use**
Disposable kits take 5-10 minutes to set up and make clean up a breeze

To learn more, visit: www.phynexus.com/mmg

Hands-Free, Walk Away Automation

AutoPlasmid MMG

- **Highly Pure Transfection Grade Plasmid DNA**
Innovative washing procedure for optimal contaminant removal
- **Advanced Silica Chemistry**
No alcohol precipitation needed; Ready-to-go plasmid DNA
- **Rugged and Reliable**
No growth constraints; Broad range of starting culture volumes

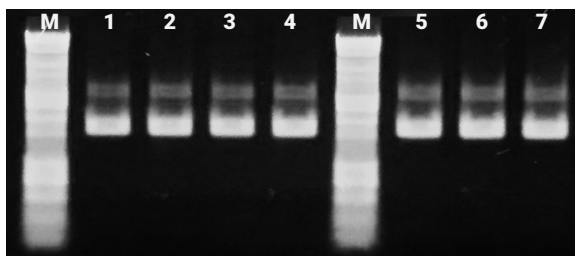


AutoPlasmid MMG at a Glance

Kit	Technology	Method	Throughput / Day (w / Overnight Run)	Culture Volume	Maximum Plasmid Mass	Typical Plasmid Mass
Maxiprep	Silica advanced chemistry	Automated dual-flow chromatography	8 (12)	150 – 500 mL	1.5 mg	0.75 mg
Megaprep	Silica advanced chemistry	Automated dual-flow chromatography	4 (8)	1 – 1.5 L	5.0 mg	3.5 mg
Gigaprep	Silica advanced chemistry	Automated dual-flow chromatography	2 (4)	2 – 3 L	10.0 mg	7.0 mg

**Actual yield is dependent on the plasmid copy number, culture growth conditions, strain of E. coli utilized, and culture volume processed.*

Application data



Top: Plasmid DNA (100 ng) was analyzed on a 0.8% agarose gel run for 20 minutes at 70V. Maxiprep plasmid eluent was added to lanes 1-4. Megaprep plasmid eluent was added to lanes 5-6, and Gigaprep plasmid eluent was added to lane 7. Lane M was a 1 Kb DNA ladder.

Right: Plasmid DNA isolation (pUC19) from E.coli DH5a using PhyTip Columns on the AutoPlasmid MMG. For the isolation of Maxiprep, Megaprep, and Gigaprep samples, 500 mL, 1 L, and 2 L TB cultures were used. Spectroscopic analysis was done using a Nanodrop device.

Maxiprep Results

Sample	Elution Volume (mL)	Concentration (mg/mL)	Yield (mg)	A260/A280	A260/A230
Maxi #1	0.85	1.20	1.02	1.87	2.04
Maxi #2	0.88	1.29	1.13	1.82	2.09
Maxi #3	0.86	1.10	0.94	1.91	2.13
Maxi #4	0.90	1.07	0.96	1.89	2.10

Megaprep Results

Sample	Elution Volume	Concentration (mg/mL)	Yield (mg)	A260/A280	A260/A230
Mega #1	2.77	1.01	2.78	1.83	2.11
Mega #2	2.92	0.98	2.84	1.82	1.99

Gigaprep Results

Sample	Elution Volume	Concentration (mg/mL)	Yield (mg)	A260/A280	A260/A230
Giga #1	9.83	0.74	7.23	1.86	2.20