

# AutoPlasmid MMG

## Automated Large Scale Plasmid Purification

### Fully Automated Maxiprep, Megaprep & Gigaprep Plasmid DNA Purification

The PhyNexus AutoPlasmid MMG is the industry's first and only fully-automated bench-top instrument for transfection grade plasmid purification at the maxiprep, megaprep and gigaprep scales. The automated 2-channel instrument delivers a robust and flexible solution capable of working with rich media, using one-touch or customizable methods, and delivering maxi, mega or giga prep scale transfection grade plasmids.



#### Easy To Use

Use your cell pellets with our disposable kits that only take 10 minutes to set up, then hit 'Start' & walk away until plasmids are ready.

#### Get Plasmid In Hours

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

#### Maxi, Mega & Giga Scales

Maximum yields of 1.5 mg for Maxiprep, 5 mg for Megaprep and 10 mg for Gigaprep.

#### Cost Benefits

Less than 1/3 the cost of outsourcing. Minimal biology experience needed to operate.



#### Transfection Grade Plasmids

Highly pure transfection grade low-endotoxin plasmid DNA for every scale.

#### Advanced Silica Chemistry

No alcohol precipitation needed; ready to go plasmid DNA. Dual Flow Chromatography

#### Increased Productivity

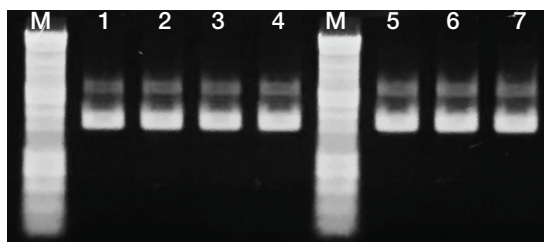
Work on your other projects and research while your plasmids are being prepared.

#### Consistent Sample Quality

Automation provides process repeatability, precision, reliability, and consistent results.

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



**Top:** Plasmid DNA (100 ng) was visualized 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 (GFP cloned into pUC19) from E.coli DH5α 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 ND-1000.

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



### Pre-Aliquoted Buffer System

Easy to use sample preparation kits are color coded and pre measured for each scale. It only takes about 5-10 minutes of hands-on time to set up the instrument, pour in the prepared sample and start a run on the AutoPlasmid MMG instrument. At the end of the run, your transfection grade plasmids are deposited in vials and are ready for use.

To learn more, visit  
[www.phynexus.com/mmg](http://www.phynexus.com/mmg)