



New Maxwell® 16 Instrument Accessories Increase the Versatility of Your Maxwell® 16 System

ABSTRACT The Maxwell® 16 System offers automated and truly walkaway DNA, RNA or protein purification that saves time and labor by eliminating reagent preparation, pipetting and centrifugation steps. New Maxwell® 16 Instrument accessories are now available to provide a simple way to increase the flexibility of your Maxwell® 16 System to better meet your downstream analysis needs.

Terri Grunst, Promega Corporation

Using the Maxwell® 16 Instrument hardware accessories, you can convert your instrument quickly and easily to process a wide variety of samples.

MAXWELL® 16 SEV AND LEV CONFIGURATIONS

The Maxwell® 16 System is comprised of a pre-programmed instrument and prefilled reagent cartridges, and it can process up to 16 samples in about 30 minutes. The Maxwell® 16 Instrument is available in two configurations: standard elution volume (SEV) and low elution volume (LEV; Table 1). The Maxwell® 16 Instrument can be set in the SEV configuration to process larger sample sizes to maximize purified sample yield, or it can be set to the LEV configuration to maximize purified sample concentration. Using the Maxwell® 16 SEV and LEV hardware accessories, you can easily personalize your Maxwell® 16 Instrument to process a wide variety of samples.

SWITCHING BETWEEN THE SEV AND LEV CONFIGURATIONS

Switching the Maxwell® 16 Instrument between the SEV and LEV configurations is simple. In approximately 5 minutes, the Maxwell® 16 Instrument can be switched from the SEV to the LEV configuration or vice versa. Only five simple steps are required to convert a Maxwell® 16 SEV Instrument to a Maxwell® 16 LEV Instrument (Table 2). To switch from LEV to SEV, perform Steps 1–4 in the reverse order. After converting the Maxwell® 16 Instrument hardware accessories, the instrument's firmware must be reset to match the hardware installed on the instrument.

Using the Maxwell® 16 Instrument hardware accessories, you can use your instrument to process a wide variety of samples (Table 3). By converting your Maxwell® 16 Instrument configuration, you can choose the final volume of the purified sample.

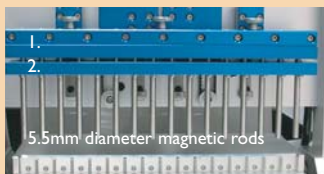
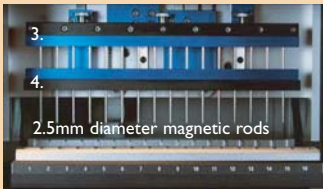






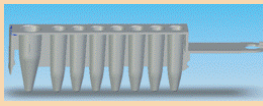


Table 1. Maxwell® 16 Instrument Hardware Accessories and Plasticware.			
Maxwell® 16 Configuration			
Instrument Hardware Accessories	Standard Elution Volume	Low Elution Volume	
Magnetic Rod Assembly and Plunger Bar Adapter	 <p>1. Blue Magnetic Rod Assembly 2. Blue Plunger Bar 5.5mm diameter magnetic rods</p>	 <p>3. Black Magnetic Rod Assembly 4. Black Plunger Bar Adapter 2.5mm diameter magnetic rods</p>	
Cartridge Rack			
Magnetic Elution Rack			
Reagent Kit Plasticware			
Cartridge (A) Plunger (B) Elution Tube (C)	  	  	

Table 2. Switching the SEV Configuration of the Maxwell® 16 Instrument to the LEV Configuration.





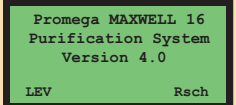
<p>1. Turn instrument power off. Unscrew the thumb-screws.</p>	
<p>2. Lift and remove the SEV Magnetic Rod Assembly.</p>	
<p>3. Attach the LEV Plunger Bar adapter to the bottom of the Plunger Bar.</p>	
<p>4. Insert the LEV Magnetic Rod Assembly, and tighten the thumbscrews.</p>	
<p>5. Reset the firmware to match new hardware configuration.</p>	

Table 3. Sample Types and Sizes for Standard Elution Volume and Low Elution Volume Configurations of the Maxwell® 16 Instrument.

	Maxwell® 16 Instrument Configuration	
	Standard Elution Volume (300–400 µl)	Low Elution Volume (30–100 µl)
Genomic DNA Purification		
Animal tissue	5–50 mg	up to 25 mg
Tissue culture cells	up to 5 × 10 ⁶ cells	up to 1 × 10 ⁶ cells
Whole blood	50–400 µl	up to 200 µl
Buffy coat	250 µl from 2.5 ml of blood	—
Gram (–) bacteria	up to 2 × 10 ⁹ cells	200 µl of culture in log phase
Gram (+) bacteria	up to 2 × 10 ⁹ cells	—
Total RNA Purification		
Animal tissue	5–50 mg	5–25 mg
Tissue culture cells	1 × 10 ³ to 5 × 10 ⁶ cells	up to 1 × 10 ⁶ cells
Blood collected in PAXgene® tubes	1 tube	1 tube
Whole blood	1–5 ml	—
Plant leaf	10–100 mg	—
RNA cleanup	up to 750 µl	—
DNA Purification from Forensic Reference Samples		
Whole blood	up to 20 µl	—
FTA® blood card	two 3 mm punches	—
Buccal swab	1/2 cotton swab	—
DNA Purification from Forensic Casework Samples		
Casework swab samples	—	1/2 cotton swab
Protein Purification		
Bacteria	—	—
Mammalian cells	up to 5 × 10 ⁶ cells	—
Insect cells	up to 5 × 10 ⁶ cells	—
Cell culture medium	up to 1 ml	—

ORDERING INFORMATION

Product	Size	Cat.#
Maxwell® 16 Instrument*	1 each	AS2000
Maxwell® 16 LEV Instrument*	1 each	AS1002
LEV Conversion Kit for Maxwell® 16	1 each	AS1250
Standard Conversion Kit for Maxwell® 16 LEV	1 each	AS1200
Maxwell® 16 Blood DNA Purification Kit*	48 preps	AS1010
Maxwell® 16 Cell DNA Purification Kit*	48 preps	AS1020
Maxwell® 16 Tissue DNA Purification Kit*	48 preps	AS1030
DNA IQ™ Reference Sample Kit for Maxwell® 16**	48 preps	AS1040

Product	Size	Cat.#
Maxwell® 16 Total RNA Purification Kit*	48 preps	AS1050
Maxwell® 16 Polyhistidine Protein Purification Kit	48 preps	AS1060
Maxwell® 16 Tissue LEV Total RNA Purification Kit*	48 preps	AS1220
Maxwell® 16 Cell LEV Total RNA Purification Kit*	48 preps	AS1225
DNA IQ™ Casework Sample Kit for Maxwell® 16**	48 preps	AS1210

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