

# Maxwell<sup>®</sup> 16 SYSTEM

Maxwell<sup>®</sup> 16 purifies genomic DNA from practically anything...  
...in under 45 minutes



## Mammalian Tissue: Example DNA Yield and Purity using the Maxwell<sup>®</sup> 16 Tissue DNA Purification Kit

Sample	Size	Yield	Typical A <sub>260</sub> /A <sub>280</sub>
Mouse Tail	1.2cm	18µg	1.8
Mouse Liver	25mg	96µg	1.9

Similar yield and purity obtained from 50mg:

Mouse Brain	Mouse Intestine
Mouse Lung	Mouse Pancreas
Mouse Spleen	Human Lung

## Mammalian Blood: Example DNA Yield and Purity using the Maxwell<sup>®</sup> 16 Blood DNA Purification Kit

Sample	Size	Yield	Typical A <sub>260</sub> /A <sub>280</sub>
Whole Human Blood*	200µl	6µg	1.8
	400µl	11µg	1.8
Buffy Coat	250µl	24µg	1.9
	500µl	48µg	1.9

\*Yield from whole blood dependent upon white cell count. Typically >3pg/white blood cell.

## DNA Purity with the Maxwell<sup>®</sup> 16 Cell DNA Purification Kit

Sample	Size	Yield	Typical A <sub>260</sub> /A <sub>280</sub>
CHO cells	5 × 10 <sup>6</sup>	11µg	1.8
HeLa cells	5 × 10 <sup>6</sup>	17µg	1.8

## Model Organisms and Insects: Example DNA Yield and Purity using the Maxwell<sup>®</sup> 16 Tissue DNA Purification Kit

Sample	Size	Yield <sup>(a)</sup>	Detected by qPCR
Ant	1 (4-5mm)	3.1µg	n.t. <sup>(b)</sup>
Brine Shrimp <i>Artemia franciscana</i>	1 (3-4mm)	1.7µg	+
Fruit Fly <i>Drosophila melanogaster</i>	1	324ng	+
Mosquito <i>Anopheles</i>	1 (5-6mm)	3.6µg	+
Nematode <i>Caenorhabditis elegans</i>	50,000	78ng	+
Tick or nymphs <i>Ixodes ricinus</i>	1	n.t. <sup>(b)</sup>	PCR <sup>(c)</sup>
Yeast <sup>(d)</sup> <i>Saccharomyces cerevisiae</i>	1 large colony	721ng	+
Yeast <sup>(d)</sup> <i>Candida albicans</i>	1 large colony	3.2µg	+
Zebrafish <i>Danio rerio</i>	50mg tissue	2.5µg	+

<sup>(a)</sup> Yield by PicoGreen<sup>®</sup> reagent (Molecular Probes)

<sup>(b)</sup> n.t. = not tested

<sup>(c)</sup> Detected by standard end-point PCR

<sup>(d)</sup> Yeast colonies require lyticase pretreatment prior to isolation

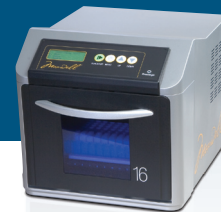
Learn more at: [www.promega.com/maxwell16](http://www.promega.com/maxwell16)



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## gDNA from practically anything in under 45 minutes

### Plant Tissue: Example DNA Yield and Purity using the Maxwell® 16 Tissue DNA Purification Kit

Sample	Size	Yield <sup>(a)</sup>	Detected by qPCR
Mustard <i>Arabidopsis thaliana</i>	1 leaf	139ng	+
Canola <i>Brassica napus</i>	5 seeds	2.3µg	+
	8mm punch	512ng	+
Strawberry <i>Fragaria ananassa</i>	8mm punch	193ng <sup>(b)</sup>	+
Soybean <i>Glycine max</i>	1 seed	3.1µg <sup>(c)</sup>	+
	8mm punch	587ng	+
Cotton <i>Gossypium hirsutum</i>	1 seed	2.6µg <sup>(c)</sup>	+
	8mm punch	854ng	+
Alfalfa <i>Medicago sativa</i>	8mm punch	1.4µg	+
Rice <i>Oryza sativa</i>	1 seed	216ng <sup>(c)</sup>	+
	5mm punch	238ng <sup>(c)</sup>	+
Tomato <i>Solanum lycopersicum</i>	8mm punch	734ng	+
Wheat <i>Triticum aestivum</i>	5mm slice	5.6µg <sup>(c)</sup>	+
	1 seed	1.4µg <sup>(c)</sup>	+
Grape <i>Vitis vinifera</i>	8mm punch	20ng <sup>(b)</sup>	+
Corn <i>Zea mays</i>	8mm punch	655ng	+

<sup>(a)</sup> Yields determined with PicoGreen® reagent (Molecular Probes)

<sup>(b)</sup> Sample digested with CelluACE™ XG System (Cat.# FF3800) in the presence of polyvinylpyrrolidone prior to isolation.

<sup>(c)</sup> Samples digested with CelluACE™ XG System (Cat.# FF3800) prior to isolation.

### Bacteria: Example DNA Yield and Purity using the Maxwell® 16 Cell DNA Purification Kit

Sample	Size	Yield	Typical A <sub>260</sub> /A <sub>280</sub>
Gram negative <i>Escherichia coli</i> BL21 (DE3)	2 x 10 <sup>9</sup>	26µg	2.0
Gram positive* <i>Bacillus cereus</i>	2 x 10 <sup>9</sup>	20µg	1.6

\*Gram positive cells require lysozyme treatment prior to isolation.

Similar yield and purity obtained from:

Gram Negative <i>Pseudomonas aeruginosa</i> <i>Proteus vulgaris</i> <i>Salmonella typhimurium</i> <i>Yersinia enterocolitica</i>	Gram Positive <i>Arthrobacter luteus</i> <i>Bacillus subtilis</i> <i>Enterococcus faecalis</i> <i>Staphylococcus aureus</i>
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Don't see your target? Call us or visit [www.promeqa.com/maxwell16/applications](http://www.promeqa.com/maxwell16/applications) for the latest information.

### Ordering Information

Product	Size	Cat. #
Maxwell® 16 Instrument*	each	PRAS2000
Maxwell® 16 SEV Hardware Kit	each	PRAS1200
Maxwell® 16 LEV Hardware Kit	each	PRAS1250
Maxwell® 16 Blood DNA Purification Kit*	48 preps	PRAS1010
Maxwell® 16 Cell DNA Purification Kit*	48 preps	PRAS1020
Maxwell® 16 Cell LEV DNA Purification Kit	48 preps	PRAS1140
Maxwell® 16 Tissue DNA Purification Kit*	48 preps	PRAS1030
Maxwell® 16 FFPE Tissue LEV DNA Purification Kit	48 preps	PRAS1130

\*For Laboratory Use

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PicoGreen is a registered trademark of Molecular Probes.

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