

A close-up photograph of a vibrant red leaf, showing a detailed network of veins. Several clear water droplets are scattered across the leaf's surface, reflecting light and adding texture to the image.

invitrogen

# DNA purification and analysis

Maximize sample yield, purity and integrity

**ThermoFisher**  
SCIENTIFIC

# Optimized for maximum yield and purity

From plasmid to genomic DNA and from DNA clean-up to automation, Invitrogen™ products bring flexible, innovative solutions to meet virtually every researcher's needs.

Explore the Invitrogen portfolio of leading solutions, kits and benchtop devices for reliable results.



**Tools for success in your molecular biology research**

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# Purification technology overview

A variety of purification technologies and chemistries to meet your purity needs

There are Invitrogen kits to suit all your nucleic acid purification needs. From plasmid DNA to genomic DNA, you'll find what you're looking for. Invitrogen nucleic acid purification products are optimized to provide maximum yield, purity and integrity from

virtually any sample type and application. We offer a wide range of specialized nucleic acid purification products based on three highly developed purification technologies: silica membrane, anion-exchange resin and switchable surface charge.

## Which purification technology is right for you?

Technology	Silica membrane	Anion-exchange resin	Switchable surface charge
Brand	PureLink™ Quick	PureLink™ HiPure	MagJET DNA and RNA Purification
Purity	Molecular grade	Transfection grade	Transfection grade

### How it works

In the presence of high salt, DNA binds to silica particles. The bound DNA is then washed to remove impurities from the original sample, and the clean DNA is eluted in water or TE buffer.

The PureLink anion-exchange columns make use of a proprietary chromatography resin (Figure 1) to purify DNA to a level equivalent to two CsCl gradients. This unique material resin provides excellent capacity with high flow rates, high resolution, high yield and efficient endotoxin removal.

MagJET magnetic bead-based technology utilizes proprietary high-capacity paramagnetic particles optimized to isolate nucleic acids. Due to their large total surface area, MagJET magnetic beads exhibit high binding capacity, resulting in superior nucleic acid yields and recovery rates typically exceeding 80%.



**Figure 1. The patented anion-exchange resin consists of an anion-exchange functional group (DEAE), a long spacer arm, and a uniform, high-surface area particle.** The resin has a very high DNA-binding capacity and an exceptional ability to separate plasmids from RNA, proteins and endotoxins.

# Plasmid DNA purification kits

Plasmid DNA that's pure and ready to go

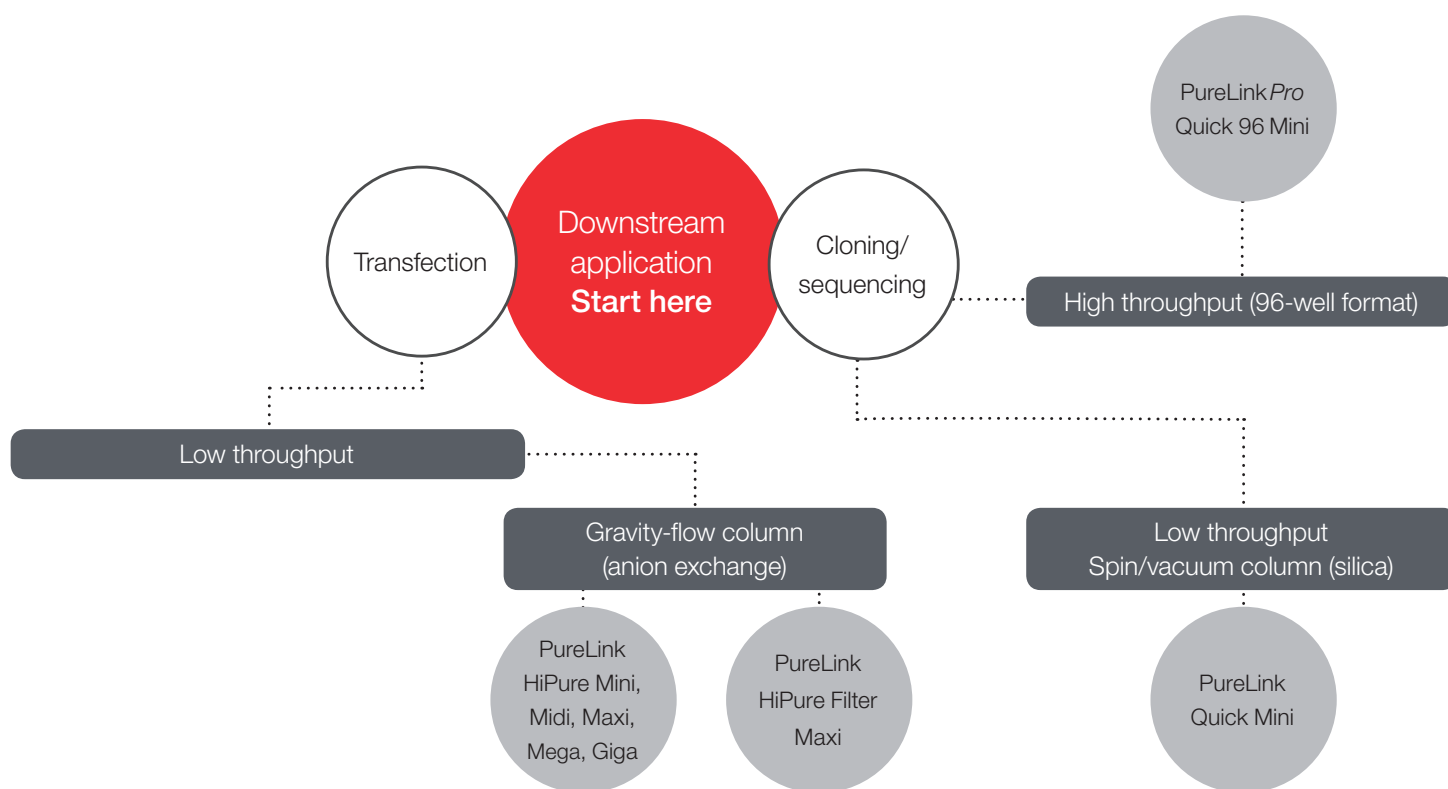
If, during plasmid preparation, your DNA has low recovery, contains impurities or just doesn't perform in your downstream experiments, you can choose from a wide range of Invitrogen high-performing plasmid purification products. These products include reagents for PCR, cloning and transfection that have been designed to help you overcome these plasmid preparation challenges. Table 2 shows a variety of formats of the Invitrogen™ PureLink™ product lines, offering high yields with extremely low endotoxin levels for maximized downstream results. Kits that include these technologies are designed to isolate plasmid DNA at the purity and scale you need.

**Nucleic acid purification**

It may be just the first step in your experiment, but it's a crucial first step (Table 1).

**Table 1. Purity grade defined in terms of downstream applications.**

Downstream applications	Purity grade	
	Transfection	Molecular
<i>In vitro</i> transcription	+	
Transfection	+	
Cloning	+	+
Nucleic acid labeling	+	+
PCR	+	+
Sequencing	+	+
Transformation	+	+



Find our complete portfolio of plasmid DNA purification products at [thermofisher.com/plasmidprep](https://thermofisher.com/plasmidprep)

**Table 2. Plasmid DNA purification products, prep sizes and approximate yields.**

Prep size	Overnight bacterial culture volume	Approximate yield
Miniprep	1–5 mL	Up to 40 µg
Midiprep	25–100 mL	Up to 200 µg
Maxiprep	100–500 mL	750–850 µg
Megaprep	500 mL–2.5 L	Up to 2.5 mg
Gigaprep	2.5–5 L	Up to 10 mg

# Plasmid purification kits

Fast, easy-to-use, and cost-effective

PureLink plasmid purification products have been developed to provide the greatest value for your money. With performance meeting or exceeding competitive offerings, and fair pricing, PureLink technology is the clear choice for plasmid purification in research laboratories.

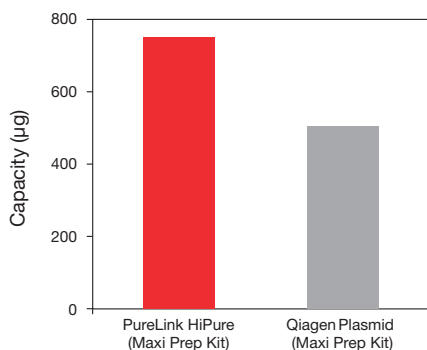
## Invitrogen™ PureLink™ HiPure Plasmid Purification Kits

Fast, easy-to-use protocols and an anion-exchange resin allow you to purify plasmid DNA at a quality

equivalent to two passes through cesium chloride gradients—one of the most rigorous method for DNA purification. In less than 2 hours, DNA is pure enough for transfections with no need for additional steps to remove contaminants like RNA, proteins, and endotoxin. Additionally, the use of phenol, chloroform, ethidium bromide and cesium chloride are eliminated, minimizing exposure to and disposal of hazardous materials.

### Maximum binding capacity

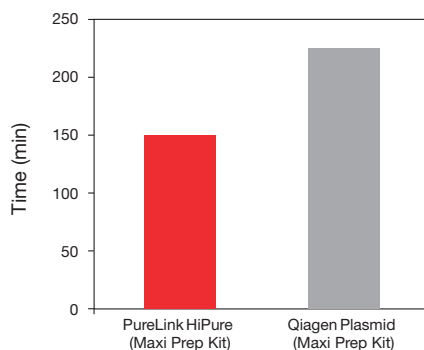
Smaller particles and longer spacer arm increase binding capacity.



- 50% greater capacity than the competition (Qiagen™ Maxi Prep Kit)
- Proprietary resin results in greater binding capacity
- Highly effective anion-exchange moiety

### Time-efficient protocols

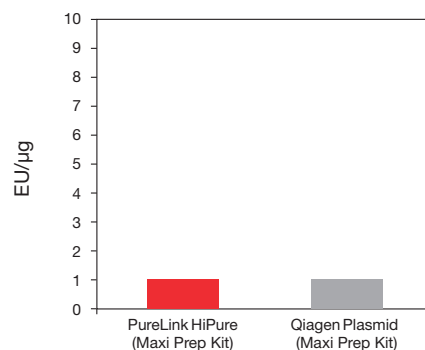
Larger column bodies result in faster flow rates.



- 33% faster than competition (Qiagen Maxi Prep Kit)
- Low endotoxin without additional steps
- Vacuum-assisted loading with the Invitrogen™ PureLink™ Maxi Kit

### Exceptional purity

Proprietary anion-exchange moiety, low endotoxin and transfection-quality as standard.



- Endotoxin levels below approx. 1.0 EU/µg
- Optimized binding selectivity
- One kit for all applications

Comparisons on this page based on internal data.





# Plasmid purification kits

High-throughput, reliable and reproducible

With the Invitrogen™ PureLink™ Pro Quick96 Plasmid Purification Kit, you can obtain high yields of high-purity plasmid DNA (Figure 2). Processing on an automated platform starting with 1.5 mL of overnight *E. coli* culture in a square-well plate typically yields 5–15 µg of plasmid DNA. The resulting plasmid DNA is supercoiled, with no detectable genomic DNA or RNA (Figure 3).

## Which PureLink plasmid purification kit is right for you?

	PureLink Quick Plasmid Miniprep Kit
Protocol time	<25 minutes
Purity (grade)	Molecular
Yield of plasmid DNA	Up to 40 µg
High throughput-compatible	No
Technology	Silica-based spin/vacuum column
Product size	50 preps

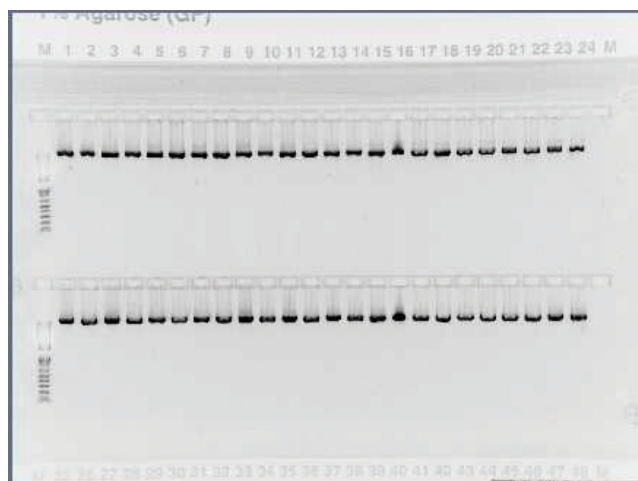


**Figure 2. The PureLink HiPure plasmid DNA purification systems are available in miniprep to gigaprep sizes.** PureLink HiPure Mini-, Midi- and Maxiprep Kits use fast-flow gravity columns, while the megaprep and gigaprep kits employ vacuum-assisted filter cartridges to accelerate processing time. A unique filtration cartridge and precipitator module is also available in several kit formats, reducing total processing time by up to 50%.



PureLink HiPure Plasmid Miniprep Kit	PureLink <i>Pro</i> Quick96 Plasmid Kit	MagJet Plasmid DNA
<120 minutes	45 minutes	Variable—not in manual
Transfection	Molecular	Molecular
Up to 30 µg	Up to 15 µg	Up to 25 µg
No	Yes	Yes
Anion-exchange gravity-flow column	Silica-based spin/vacuum plates	Magnetic beads
100 preps	4 x 96 preps	96 preps, 4 x 96 preps

**Figure 3. High purity of plasmid DNA purified using the PureLink Quick96 Plasmid Kit.** Invitrogen™ pcDNA™ 3.1/His/lacZ plasmid DNA (5 µg) purified using a liquid-handling robot and the PureLink Quick96 Plasmid Kit shows high yields of supercoiled plasmid DNA with no detectable genomic DNA or RNA contamination.



# Tissue and cell genomic DNA purification kits

## High-yield genomic DNA from tissue and cells

We offer several different kits for purifying genomic DNA from a variety of tissue and cell sample types. We offer a range of genomic DNA extraction kits for sensitive, scalable purification from an expansive set of starting materials to maximize process efficiency and downstream performance. This includes a broad range of kits for purifying genomic DNA from a variety of samples including tissue and cells, to meet your research needs. The Invitrogen™ PureLink™ Genomic DNA Mini Kit enables high-yield, high-purity genomic DNA (gDNA) extractions from a wide variety of sample types (Figure 4). Use of this kit enables genomic DNA purification from blood, tissues, cells, bacteria, swabs and blood spots, with a familiar silica-based, microcentrifuge spin-column format.

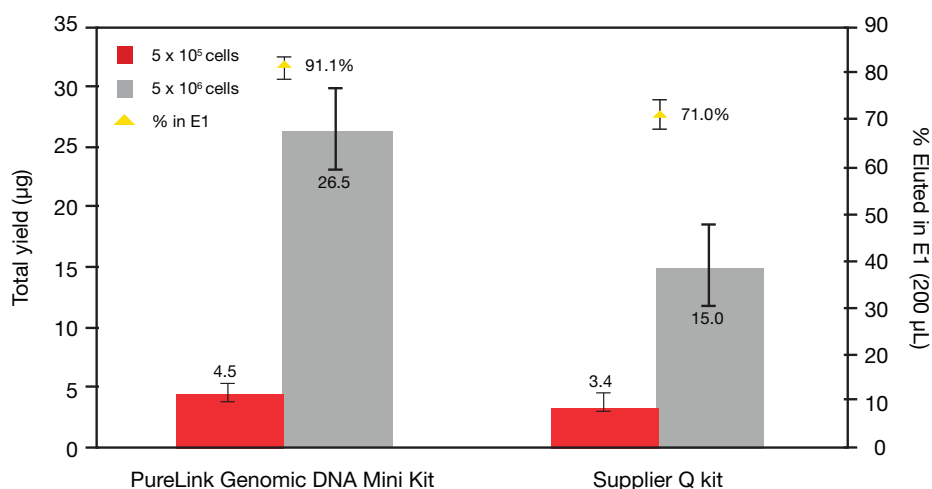


Figure 4. Higher, more-concentrated yields achieved with the PureLink Genomic DNA Mini Kit.

### Which genomic DNA purification kit is right for your tissue or cell samples?

	<b>DNAzol reagent</b>	<b>PureLink Genomic DNA Mini</b>	<b>PureLink <i>Pro</i> 96 Genomic DNA</b>	<b>MagMAX-96 DNA Multi-Sample</b>
	Process the largest amount of tissue	Fast isolation of gDNA from a variety of samples	High-yield, high-purity gDNA in a plate format	Rapid and automated extraction of DNA
<b>Tissue starting material</b>	Up to 50 mg	Up to 25 mg	Up to 25 mg	Up to 25–50 mg, depending on tissue type
<b>Yield</b>	Up to 250 µg from tissue	5–10 µg from tissue	5–10 µg from tissue	10–80 µg from tissue
<b>Isolation method</b>	Organic extraction	Silica spin column	Silica filter plate	Scalable, flexible format with magnetic beads
<b>High throughput-compatible</b>	No	No	Yes	Yes
<b>Compatible applications</b>	Cloning, qPCR, sequencing	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping
<b>Prep time</b>	10–30 minutes	15 minutes	35 minutes	45 minutes
<b>Prep size</b>	100	50, 250	4 x 96	50, 96, 500, 2,500
<b>Price per prep</b>	\$1.67	\$2.76	\$2.62	\$2.82



# Blood and serum genomic DNA purification kits

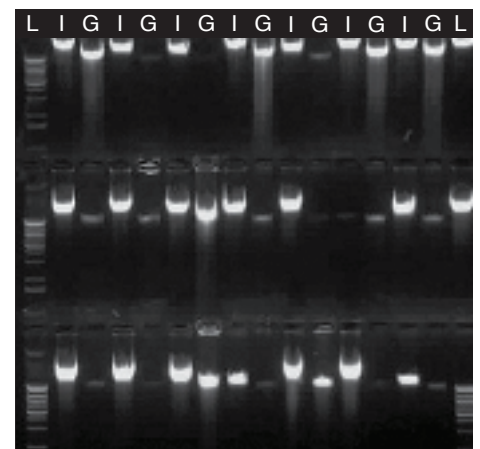
## Rapid and efficient extraction of genomic DNA from human blood

The emergence of pharmacogenomic centers of excellence has resulted in increasing needs for purification of high-quality genomic DNA from large volumes of blood. Since samples are collected and shipped worldwide, every sample may differ with regard to storage and shipping conditions. Choosing the right genomic DNA purification is important based on your needs and expected end results. We offer a wide range of kits designed to isolate genomic DNA from your blood or serum samples at the purity and scale you need.

### **Invitrogen™ GeneCatcher™ purification system**

The GeneCatcher purification system offers a method to purify gDNA from large volumes of blood that is robust and reproducible, enabling complete sample recovery and integrity. The Invitrogen™ GeneCatcher gDNA Blood Kits allow rapid and efficient extraction of genomic DNA (gDNA) from human blood, including archived or poorly stored blood samples (Figure 5). Genomic DNA is extracted from blood samples using the cost-effective, user-friendly magnetic bead-based GeneCatcher technology without the use of centrifugation.

**Figure 5. Purification of gDNA from archived whole blood samples using the GeneCatcher gDNA Blood Kit.** An 0.8% agarose gel was used to evaluate gDNA extractions from archived whole blood samples (blood samples frozen >8 years). Blood samples were split into 2 equal aliquots, and gDNA was extracted using the GeneCatcher gDNA Blood Kit and a kit from competitor G. The GeneCatcher kit extractions employ magnetic beads, while competitor G's kit uses a form of the traditional lysis and DNA precipitation method that has been shown to co-purify agents that are inhibitory to downstream applications. I = GeneCatcher extractions; G = competitor G extractions; L = 1 Kb DNA Extension Ladder, largest band 40 kb.





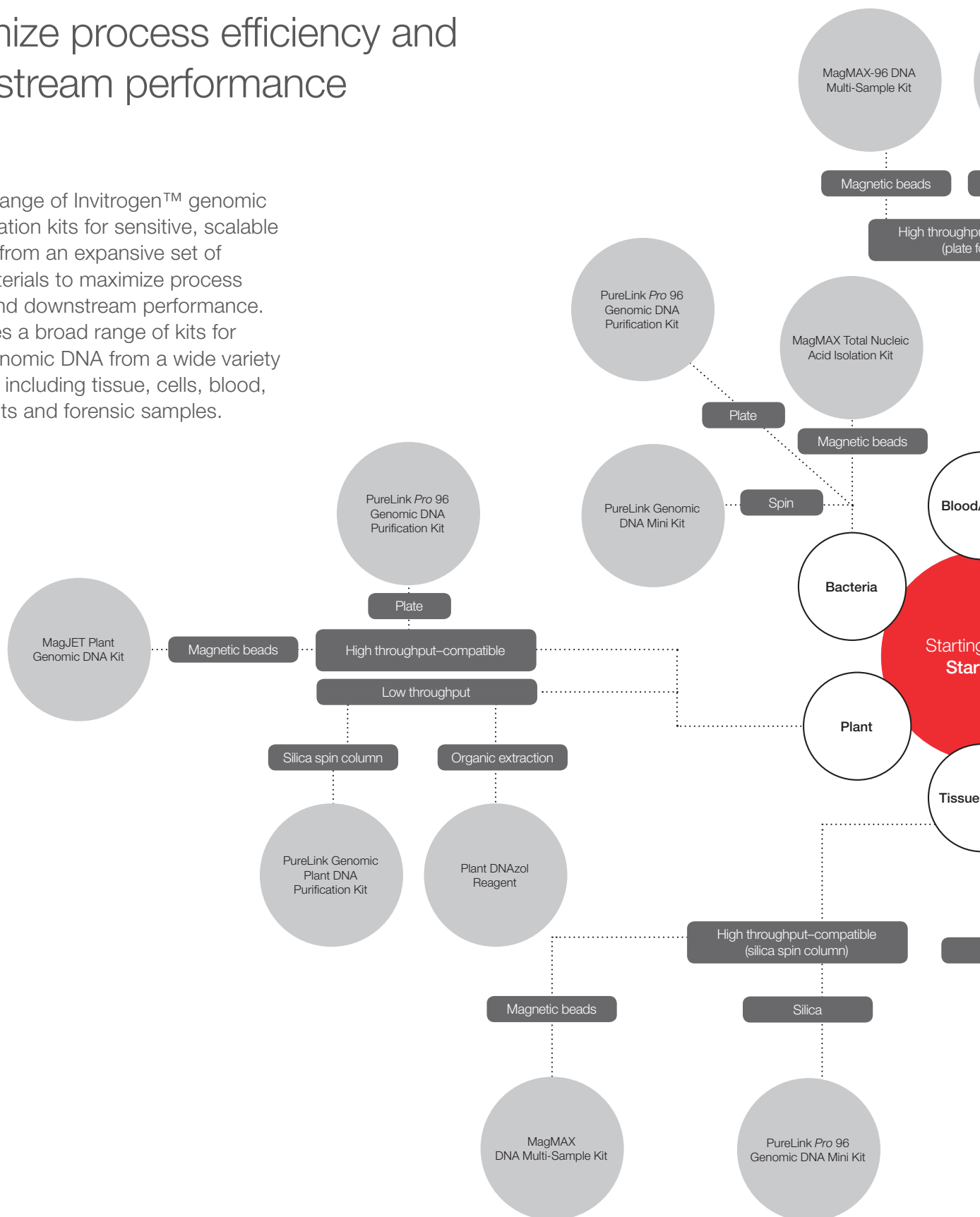
### Which genomic DNA purification kit is right for your blood or serum samples?

	DNAzol BD	PureLink Genomic DNA Mini	PureLink <i>Pro</i> 96 Genomic DNA	MagMAX-96 DNA Multi-Sample
	Process the largest amount of blood	Fast isolation of gDNA from blood	High-yield, high-purity gDNA in a plate format	Rapid and automated extraction of DNA
<b>Blood input</b>	500 µL	200 µL	200 µL	50–350 µL
<b>Yield</b>	10–20 µg	3–10 µg	3–10 µg	1.5–16 µg
<b>Isolation method</b>	Organic extraction	Silica spin column	Silica filter plate	Scalable, flexible format with magnetic beads
<b>High throughput-compatible</b>	No	No	Yes	Yes
<b>Compatible applications</b>	Cloning, qPCR, sequencing	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping
<b>Prep time</b>	10–30 minutes	15 minutes	35 minutes	45 minutes
<b>Prep size</b>	100	50, 250	4 x 96	50, 96, 500, 2,500
<b>Price per prep</b>	\$1.67	\$2.76	\$2.62	\$2.82

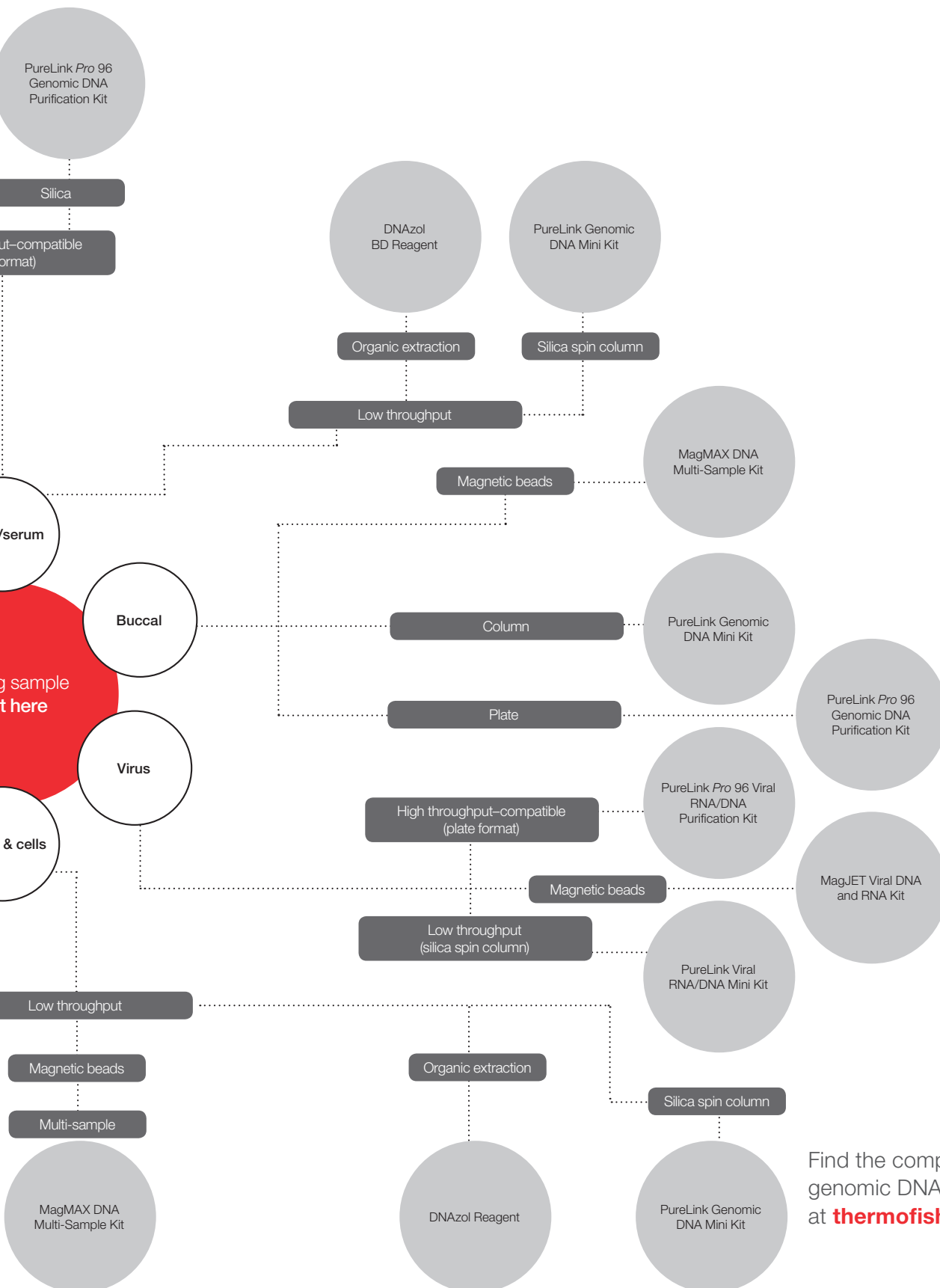
# Genomic DNA purification kits

Maximize process efficiency and downstream performance

We offer a range of Invitrogen™ genomic DNA purification kits for sensitive, scalable purification from an expansive set of starting materials to maximize process efficiency and downstream performance. This includes a broad range of kits for purifying genomic DNA from a wide variety of samples, including tissue, cells, blood, serum, plants and forensic samples.







Find the complete portfolio of genomic DNA purification products at [thermofisher.com/gdnaprep](https://thermofisher.com/gdnaprep)

# Plant genomic DNA isolation kits

## Successful plant DNA extraction that's easy on you

Plant tissue is difficult enough to work with due to the high levels of polysaccharides and polyphenols present. Why compound the complexity with tedious, inefficient processes? Cetyl trimethyl ammonium bromide (CTAB) methods require excessive time and handling, limiting your throughput. Silica membrane- or magnetic bead-based protocols rely on guanidine and ethanol for DNA capture, but these reagents often don't remove inhibitors inherent in plant samples that can carry over into the final product and interfere with downstream PCR applications. This leads to frequent sample processing failure, necessitating

that you repeat the purification—if you have the time and sample to spare. Now we offer you products specifically designed for easy, high-yield, high-purity DNA purification from plant samples. Inhibitors are removed for reliable downstream results. Make your DNA isolation from plant samples easier on you and easier on your samples, while achieving high-yield, high-purity results with Invitrogen plant molecular biology reagents.



### Which genomic DNA purification kit is right for your plant samples?

	Plant DNAzol Reagent	PureLink Genomic DNA Plant Mini	PureLink <i>Pro</i> 96 Genomic DNA	MagJET DNA Plant
	Most cost effective	High quality gDNA at a great value	Fast isolation of gDNA from a variety of plant samples	Rapid & automated extraction of DNA
<b>Plant tissue input</b>	100 mg	100 mg	Up to 25 mg	50 mg
<b>Yield</b>	Varies based on starting material	1–15 µg	5–10 µg from tissue	Varies based on starting material
<b>Isolation method</b>	Organic extraction	Silica spin column	Silica filter plate	Scalable, flexible format with magnetic beads
<b>High throughput-compatible</b>	No	No	Yes	Yes
<b>Compatible applications</b>	Cloning, qPCR, sequencing	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping
<b>Prep time</b>	60 minutes	40 minutes	35 minutes	40 minutes
<b>Prep size</b>	~330	50	4 x 96	96
<b>Price per prep</b>	\$0.58	\$3.60	\$2.62	\$2.12



Empower your plant science research: go to [thermofisher.com/agbio](https://thermofisher.com/agbio) to learn more and to purchase our products and solutions.



# Viral genomic DNA purification kits

## High-yield genomic DNA from tissue and cells

Purification of viral nucleic acids poses unique challenges for getting good recovery and detection sensitivity. Capture and lysis of virus particles from very dilute solutions or cell-free samples is the first hurdle. We've developed DNA purification products that are optimized to provide maximum viral DNA yield, purity and integrity from a broad range of sample types in several format options.



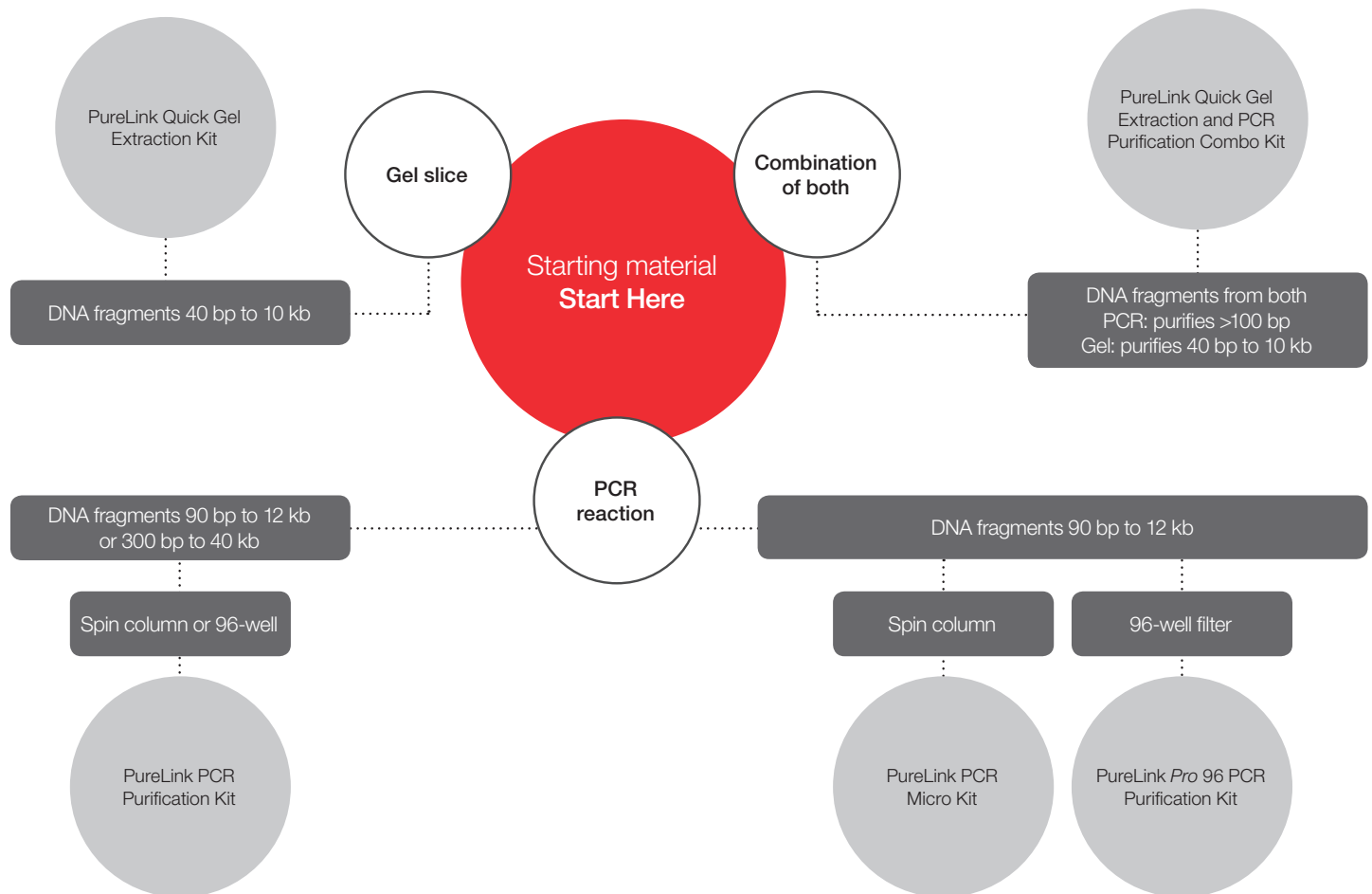
### Which genomic DNA purification kit is right for your viral samples?

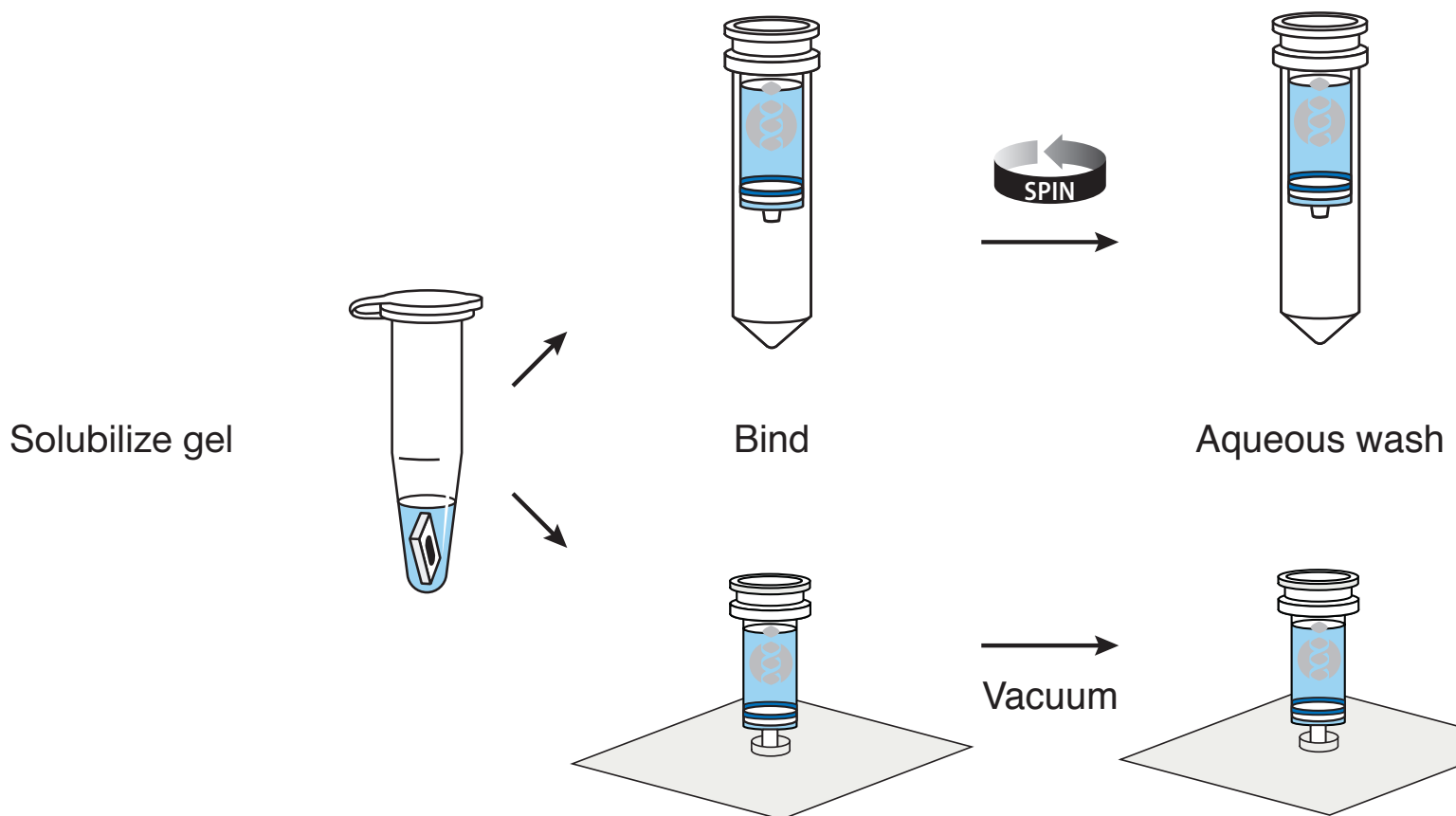
	PureLink Viral RNA/DNA Mini	PureLink Pro 96 Viral RNA/DNA	MagJET Viral RNA and DNA Kit
	Fast isolation of viral nucleic acid	Easy to use with high sensitivity	Rapid & automated extraction of viral nucleic acid
<b>Sample input</b>	500 µL cell-free sample	200 µL cell-free sample	200 µL cell-free sample
<b>Compatible samples</b>	Plasma, serum, cerebrospinal fluid	Plasma, serum, cerebrospinal fluid	Plasma, serum, saliva, blood
<b>Isolation method</b>	Silica spin column	Filter plate	Scalable, flexible format with magnetic beads
<b>High throughput-compatible</b>	No	Yes	Yes
<b>Compatible applications</b>	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping	Cloning, qPCR, sequencing, genotyping
<b>Prep time</b>	15 minutes	35 minutes	45 minutes
<b>Prep size</b>	50	4 x 96	96
<b>Price per prep</b>	\$4.42	\$3.01	\$2.45

For more information on Invitrogen viral RNA/DNA purification and detection products, go to [thermofisher.com/viral](https://www.thermofisher.com/viral)

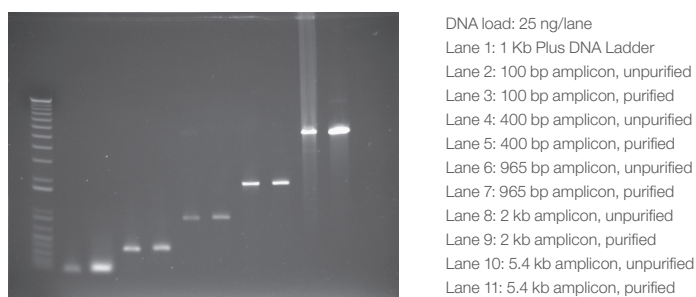
# DNA clean-up solutions for every downstream application

Whether isolating a specific size of DNA from complex PCR mixtures or recovering bands from agarose gels, we have solutions that will meet your needs. Kit formats offer simple and rapid PCR clean-up using spin columns or magnetic beads, with flexible size selection and one-tube, 5-minute protocols. Isolated DNA is ready for sequencing, PCR, transcription, mapping, cloning and labeling.

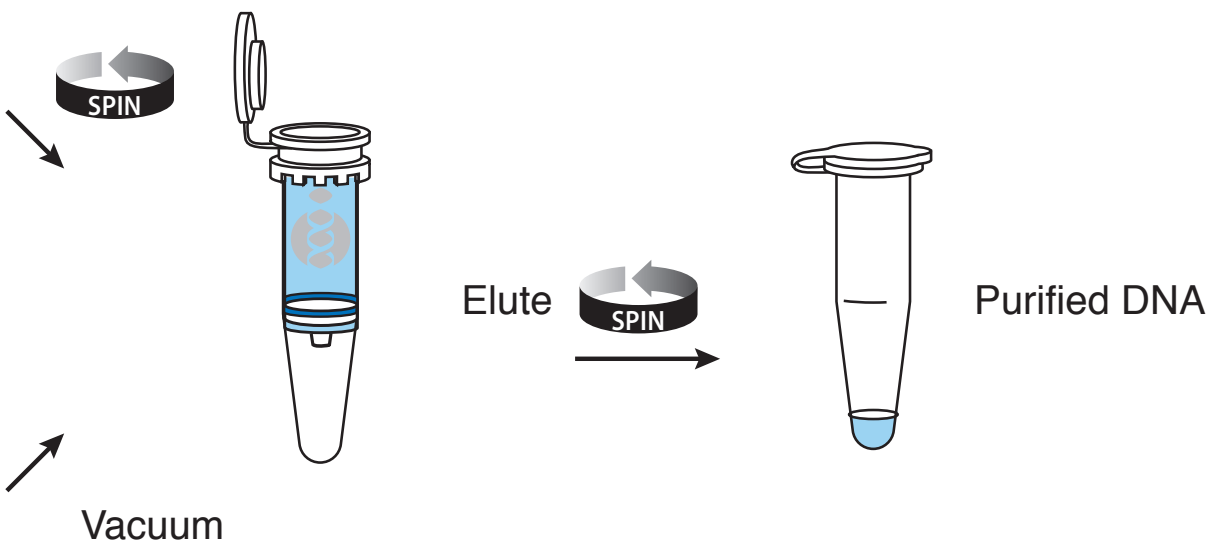




**Figure 6. Invitrogen™ PureLink™ Quick Gel Extraction Kit protocol.** Gel fragments are first solubilized to release the DNA. The sample is then loaded on a PureLink spin column and isolated using a simple bind/wash/elute procedure. DNA fragments are recovered in TE buffer or water in a ready-to-use format.



**Figure 7. Amplification of DNA isolated using the PureLink Quick Gel Extraction Kit.** PCR amplicons varying in size from 100 bp to 5.4 kb were prepared using recombinant Invitrogen™ *Taq* DNA Polymerase, native (Cat. No. 18038-018). A portion of each PCR reaction was run on a 1% Invitrogen™ UltraPure™ Agarose gel (Cat. No. 16500500; data not shown), and amplicon bands were excised and extracted using the PureLink Quick Gel Extraction Kit. Unpurified and gel-extracted PCR products were loaded onto a 1% agarose gel and visualized using Invitrogen™ SYBR™ Safe DNA Gel Stain (Cat. No. S33100).



### Which DNA clean-up kit is right for you?

Product	Cat. No.	Quantity	Protocol time	DNA clean-up application	Format	Elution volume	DNA fragment size
<b>PureLink PCR Purification Kit</b>	K310001	50 preps	<15 min	PCR clean-up	Silica spin column	50 µL	90 bp to 12 kb, or 300 bp to 40 kb
	K310002	250 preps					
<b>PureLink Pro 96 PCR Purification Kit</b>	K310096A	4 plates (4 x 96 rxns)	20 min	PCR clean-up	96-well silica plate	50 µL–150 µL	90 bp to 12 kb
<b>PureLink PCR Micro Kit</b>	K210010	10 preps	≤10 min	PCR clean-up	Silica spin column	5 µL–20 µL	90 bp to 12 kb
	K310050	50 preps					
	K310250	250 preps					
<b>PureLink Quick Gel Extraction Kit</b>	K210012	50 preps	<30 min	Gel extraction	Silica spin/vacuum column	30 µL–100 µL	Gel: purifies 40 bp to 10 kb
	K210025	250 preps					
<b>PureLink Quick Gel Extraction Kit and PCR Purification Combo Kit</b>	K220001	50 preps	10–30 min	PCR clean-up and gel extraction	Silica spin/vacuum column	30 µL–100 µL	PCR: purifies >100 bp Gel: purifies 40 bp to 10 kb

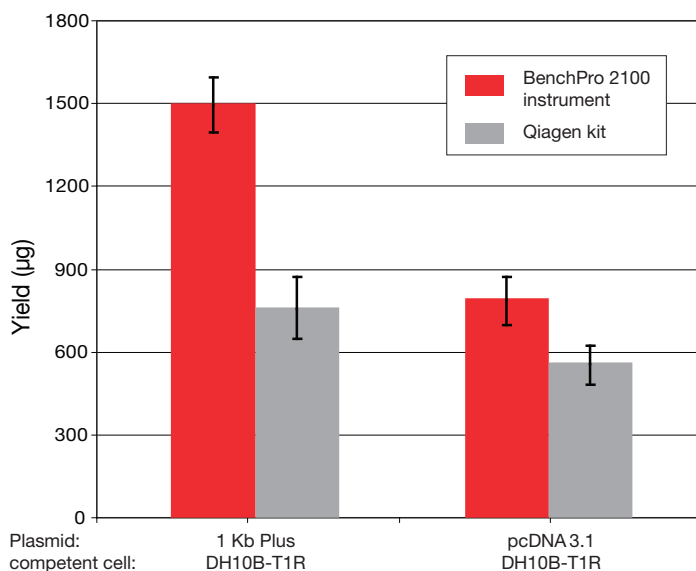
DNA clean up



# Automated nucleic acid purification systems

We offer a leading-edge portfolio of Invitrogen products for laboratories performing automated nucleic acid purification. Automated solutions that cover each step of the life science or molecular testing research laboratory workflow are included, enabling high-quality, reliable data. We provide innovative, automated solutions to suit all your application requirements and daily throughput needs. Automated Invitrogen solutions are rapid, reliable and cost-effective, minimizing user-to-user variability to enable reproducibility that provides the sensitivity and purity required to meet the rigorous standards of your demanding research.

- The Invitrogen™ BenchPro™ 2100 Plasmid Purification System, the latest addition to our automated purification product line-up, is designed to deliver transfection-grade large-scale plasmid purification (Figure 8)
- The Applied Biosystems™ MagMAX™ Express Magnetic Particle Processors incorporate reliable magnetic bead-based extraction

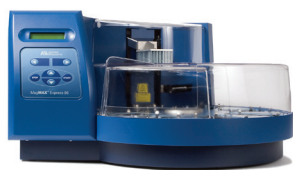


**Figure 8. Obtain higher yields using the BenchPro 2100 Plasmid Purification System.**

This graph shows the average DNA yields from 125 mL of *E. coli* culture (OD 2.0–2.4) of 1 Kb Plus (19 kb) and Invitrogen™ 3.1 (+) pcDNA™ Mammalian Expression Vector (6.2 kb) plasmids purified using the BenchPro 2100 instrument or the Qiagen™ HiSpeed™ Plasmid Maxi Kit.

## Invitrogen automated sample preparation technologies comparison chart

### MagMAX Magnetic Particle Processors



### BenchPro 2100 Plasmid Purification System



<b>Benefits</b>	An economical and adaptable open system with multiple throughput options utilizing bead-based purification; available in 24- and 96-well formats, with the flexibility to add your own buffers/media	An automated, closed purification system with fully automated anion-exchange membrane technology, delivering transfection-grade large-scale plasmid purification with <5 min setup time to add in straight from culture
<b>Targets</b>	RNA, genomic DNA (96-well format only), and viral RNA/DNA	Plasmids
<b>Protocols</b>	Preloaded and user-editable MagMAX™ kits available to support tissue, cells, blood, FFPE, bacteria, buccal, plant, viral samples and liquid (e.g., serum)	Preloaded
<b>Reagents</b>	Reagent setup required (plate filling)	Preloaded, ready-to-use kits
<b>Accessories</b>	Sold separately from kits	Complete kit, including purification cards, reagent trays and validated air compressors
<b>Sample input volume</b>	MagMAX Express-24: 20–200 µL MagMAX Express-96: 20–1000 µL	100–125 mL of LB culture
<b>Throughput</b>	MagMAX Express-24: up to 24 samples/run MagMAX Express-96: 96 samples/run	Up to 2 samples/run
<b>Instrument dimensions (W x D x H)</b>	MagMAX Express-24: 11.4 x 11.4 x 12.2 inch MagMAX Express-96: 26.8 x 23.6 x 15 inch	13 x 20.8 x 11.7 inch

# Nucleic acid quantitation

## Accurate, sensitive and specific quantification of DNA and RNA

For nucleic acid quantitation, Invitrogen™ Qubit™ technology employs extreme selectivity not possible with absorbance measurements, resulting in accuracy high enough to quantitate even the most dilute or low-abundance samples, while still leaving enough sample for downstream applications (Figure 9).

### Benefits of using Qubit technology

- Better selectivity and accuracy than absorbance assays
- Effectively quantitates dilute and low-abundance samples
- Available for DNA and RNA samples

Upon binding to nucleic acid, the fluorescence of the Qubit dyes increases several hundred-fold, giving a very high signal-to-background ratio for exceedingly high sensitivity—up to 1,000 times more sensitive than absorbance readings.

### **Invitrogen™ Qubit™ 2.0 Fluorometer for accurate, precise benchtop quantitation of DNA and RNA**

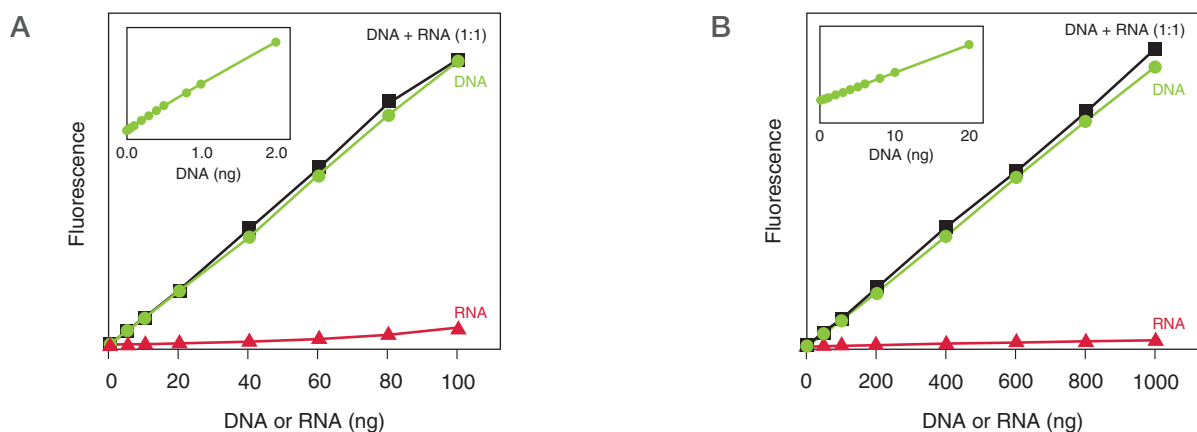
Use of the Qubit 2.0 Fluorometer for nucleic acid quantitation is:

- Selective—each Qubit assay kit is highly sensitive for a single analyte (RNA, DNA, or protein)
- Sensitive—samples with concentrations as low as 10 pg/μL of DNA and 12.5 μg/mL of protein may be accurately and reliably quantified
- Simple and intuitive—the Qubit 2.0 Fluorometer provides the same high accuracy you've come to expect, but now is even faster and requires less effort to use

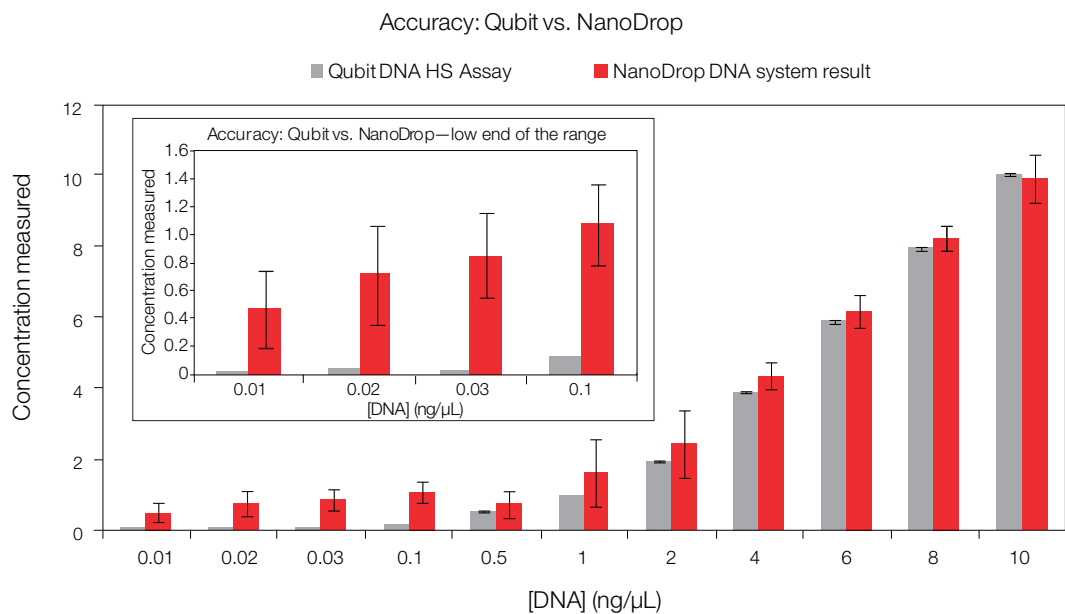
The Qubit 2.0 Fluorometer utilizes specifically designed fluorometric technology using Invitrogen™ Molecular Probes™ dyes that only fluoresce when bound to DNA, RNA or protein. These fluorescent dyes emit signals ONLY when bound to specific target molecules, even in the presence of free nucleotides or degraded nucleic acids. This specificity allows you to get very accurate results because Qubit technology only reports the concentration of the molecule of interest, not contaminants. Qubit fluorometric quantitation provides exceptionally specific and sensitive DNA and RNA quantitation, even at low concentrations (Figure 10).

Qubit assay kits for the Qubit 2.0 Fluorometer contain reagent, premade calibration standards and premade buffer, and are also available in quantities of 500 assays.

Please go to [thermofisher.com/qubit](https://thermofisher.com/qubit) for a full product list.



**Figure 9. Invitrogen™ Qubit™ High-Sensitivity and Broad-Range DNA Assay Kits.** The Qubit High-Sensitivity DNA Assay Kit (A) and the Qubit Broad-Range DNA Assay Kit (B) have linear detection ranges of 0.2–100 ng and 2–1,000 ng, respectively. Each kit is selective for dsDNA, even in the presence of an equal mass of RNA. The x-axis gives the mass of nucleic acid at a given point when DNA or RNA is assayed alone. In the 1:1 mixture, the total mass of nucleic acid at a given point is double what is stated on the x-axis.



**Figure 10. Accuracy and precision of the Qubit 2.0 Fluorometer.** Ten replicates of lambda DNA at concentrations of 0.01–10 ng/μL were assayed using the Invitrogen™ Qubit™ DNA HS Assay on the Qubit 2.0 Fluorometer according to the standard kit protocol. The same concentrations of DNA were measured in ten replicates using a Thermo Scientific™ NanoDrop™ ND-1000 Spectrophotometer, and results were compared for both accuracy and precision. Each bar represents the average of 10 replicates. Error bars represent the standard deviations of the 10 replicates. The concentrations indicated are those of DNA in the starting samples, before dilution in the Qubit assay tubes.

# Ordering information

## Plasmid purification kits

Product	Cat. No.	Quantity
PureLink HiPure Plasmid Miniprep Kit	K210002	25 preps
	K210003	100 preps
PureLink Quick Plasmid Miniprep Kit	K210010	50 preps
	K210011	250 preps
PureLink <i>Pro</i> Quick 96 Plasmid Purification Kit	K211004A	4 x 96 rxns
PureLink HiPure Plasmid Midiprep Kit	K210004	25 preps
	K210015	50 preps
PureLink HiPure Plasmid Filter Midiprep Kit	K210014	25 preps
PureLink HiPure Plasmid Maxiprep Kit	K210006	10 preps
	K210007	25 preps
PureLink HiPure Plasmid Filter Maxiprep Kit	K210016	10 preps
	K210017	25 preps
PureLink HiPure Plasmid FP (Filter and Precipitator) Maxiprep Kit	K210026	10 preps
	K210027	25 preps
PureLink HiPure Plasmid Megaprep Kit	K210008	4 preps
PureLink HiPure Plasmid Gigaprep Kit	K210009	2 preps

## Genomic DNA purification kits

Product	Cat. No.	Quantity
PureLink Genomic DNA Mini Kit	K1820-00	10 preps
	K1820-01	50 preps
	K1820-02	250 preps
PureLink <i>Pro</i> 96 Genomic DNA Mini Kit	K182104A	4 x 96 preps
PureLink <i>Pro</i> 96 Viral RNA/DNA Purification Kit	133800-96A	4 plates (4 x 96 rxns)
PureLink <i>Pro</i> 96 Viral RNA/DNA Mini Kit	12280-050	50 preps
PureLink Genomic Plant DNA Mini Kit	K183001	50 preps
DNAzol Reagent	10503027	100 mL

## Plasmid clean-up and gel extraction kits

Product	Cat. No.	Quantity
PureLink Quick Gel Extraction and PCR Purification Combo Kit	K220001	50 preps
PureLink Quick Gel Extraction Kit	K210012	50 preps
	K210025	250 preps
PureLink PCR Purification Kit	K310001	50 preps
	K310002	250 preps
PureLink <i>Pro</i> 96 PCR Purification Kit	K310096A	4 plates (4 x 96 rxns)
PureLink PCR Micro Kit	K310050	50 preps



## Automated nucleic acid purification systems

Product	Cat. No.	Quantity
<b>BenchPro 2100 system</b>		
BenchPro 2100 Plasmid Processing Station	MC1001	1 each
BenchPro 2100 Plasmid Purification Card and Reagent Tray Kit	MC2001	1 kit (4 cards)
BenchPro 2100 Piercing Device	MC3001	1 each
BenchPro 2100 Waste Tray	MC4001	1 kit (2 trays)
BenchPro 2100 Air Compressor	MC5001	1 each
<b>MagMAX system</b>		
MagMAX Express Magnetic Particle Processor	4400074	1 each
MagMAX Express-96 Deep Well Magnetic Particle Processor	4400077	1 each
MagMAX Express-96 Standard Magnetic Particle Processor	4400076	1 each
MagMAX-96 DNA Multi-Sample Kit (96 preps)	4413021	96 preps
MagMAX Total Nucleic Acid Isolation Kit	AM1840	100 rxns
MagMAX FFPE DNA Isolation Kit	4463578	96 preps
MagMAX FFPE Total Nucleic Acid Isolation Kit	4463365	96 preps

## MagJET

Product	Cat. No.	Quantity
<b>MagJET</b>		
MagJET Viral RNA/DNA Kit	K2781	96 preps
MagJET Plant RNA Kit	K2771	96 preps
MagJET Plasmid DNA Kit	K2791	96 preps

## Nucleic acid quantitation

Product	Cat. No.	Quantity
Qubit Fluorometer	Q32866	1 each
Qubit Quantitation Starter Kit	Q32871	1 each
Qubit Quantitation Lab Starter Kit	Q32872	1 each
Qubit dsDNA BR Assay Kit	Q32850	100 assays, 2–1,000 ng
	Q32853	500 assays, 2–1,000 ng
Qubit dsDNA HS Assay Kit	Q32851	100 assays, 0.2–100 ng
	Q32854	500 assays, 0.2–100 ng
Qubit ssDNA HS Assay Kit	Q10212	100 assays, 1–200 ng
Qubit Assay Tubes	Q32856	Set of 500

# invitrogen

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