

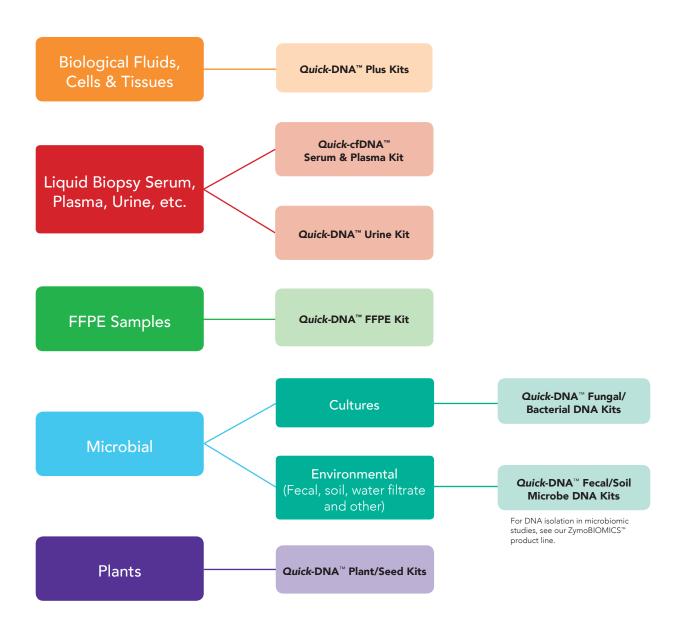
# **DNA from any Sample**

Quick-DNA™



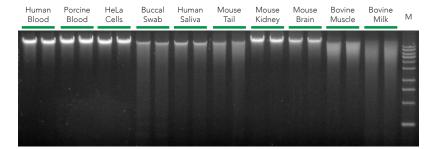
## **Quick-DNA™** Overview

Zymo Research offers a range of genomic DNA isolation kits that are suitable for extracting high molecular weight DNA from a wide variety of sample types including tissue, fresh and paraffin-embedded tissue sections, cultured cells, saliva, buccal cells, whole blood, plasma, serum, urine, bacteria, fungi, yeast, algae, viruses, and mitochondria. Our genomic DNA isolation kits yield high-quality DNA that is ideal for use in any sensitive downstream applications such as PCR, DNA sequencing, endonuclease digestion, and methylation detection.



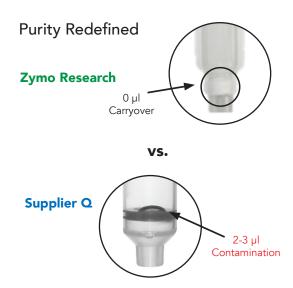
# **Quick-DNA™ Plus Kits**

- Extract high-quality DNA easily and reliably from any biological fluids, cultured/monolayer cells, or solid tissues
- Zymo-Spin<sup>™</sup> technology ensures DNA is ready for all sensitive downstream applications such as qPCR, DNA-sequencing, arrays, and methylation analysis.



### High-quality DNA from any sample

High-quality DNA obtained from a wide range of biological samples using the *Quick*-DNA™ Miniprep Plus Kit. DNA purified using the *Quick*-DNA™ Miniprep Plus Kit is ultra-pure, highly concentrated, and ready for all downstream applications. Input DNA was standardized to 300 ng and analyzed in a 1% (w/v) TAE/agarose/EtBr gel. The size marker "M" is a 1 kb ladder (Zymo Research).



Zymo-Spin<sup>™</sup> technology ensures no carryover of buffer, salts, or other PCR inhibitors. DNA is ready for all sensitive downstream applications such as qPCR, Next-Generation sequencing arrays, and methylation analysis.

### 8.00 7.00 R2=0.9936 6.00 Total Yield (µg) 5.00 4.00 3.00 2.00 1.00 0.00 0 50 100 150 200 250

Reliable & Consistent

DNA Yields Increase Linearly with Increasing Volumes of Human Whole Blood Using the *Quick*-DNA™ Miniprep Plus Kit. Six replicates of 25, 50, 100, and 200 µl of human whole blood were processed.

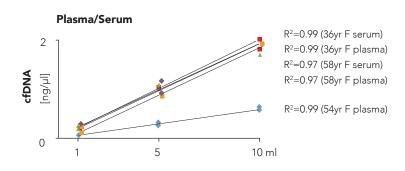
Human Whole Blood (µl)

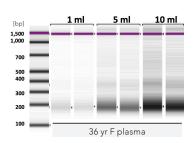
Product	Cat. No.	Size
<i>Quick</i> -DNA™ Microprep Plus Kit	D4074	50 preps
<i>Quick</i> -DNA <sup>™</sup> Miniprep Plus Kit	D4068T D4068 D4069	10 preps 50 preps 200 preps
Quick-DNA™ Miniprep Kit (no Proteinase K)	D3024 D3025	50 preps 200 preps

# Quick-cfDNA™ Serum & Plasma Kit

- High-quality DNA, including cell-free, is easily and robustly purified from up to 10 ml of serum/plasma or up to 1 ml amniotic fluid or cerebrospinal fluid.
- Zymo-Spin™ Column technology enables elution of DNA in as little as 35 µl and ensures it is ready for all sensitive downstream applications such as qPCR and Next-Generation sequencing.

### Reliable & Efficient Recovery of Cell-free DNA (up to 10 ml)





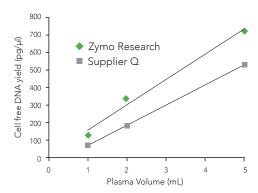
Cell-free DNA recovery is directly scalable using the *Quick*-cfDNA™ Serum & Plasma Kit. Graphs and gel image show the linear recovery of cfDNA from human plasma and serum (healthy female donors), as measured by 2200 Tapestation® (Agilent, in duplicates).

### Compatible with Many Body Fluids

# Maternal plasma Amniotic Gerebrospinal fluid 48,500bp 15,000bp 4,000bp 4,000bp 3,000bp 2,500bp 1,200bp 9000b 600bp 4000bp 250bp 1000bp

Total DNA is efficiently purified from cell-free biological fluids with the Quick-cfDNA $^{™}$  Serum & Plasma kit. Total DNA, including both high and low molecular weight species, purified (duplicates) from human maternal plasma, amniotic fluid and cerebrospinal fluid was analyzed by 2200 TapeStation $^{®}$  (Agilent).

### **Superior Performance**



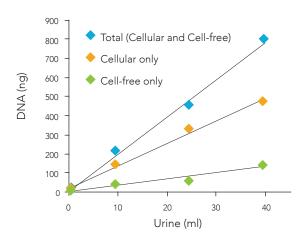
The Quick-cfDNA™ Serum & Plasma kit robustly recovers cell-free DNA when compared to Supplier Q. The DNA recovered is linearly proportional to the input volume of sample when compared with Supplier Q. Concentration of the smallest nucleosomal fragment (N1, ~180bp) DNA was determined using the 2100 Bioanalyzer (Agilent).

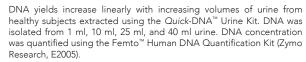
Product	Cat. No.	Size
<i>Quick</i> -cfDNA <sup>™</sup> Serum & Plasma Kit	D4076	50 preps

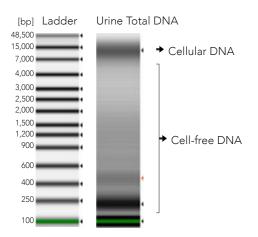
# Quick-DNA™ Urine Kit

- Purify cellular and/or cell-free DNA easily and reliably from up to 40 ml of urine.
- Uniquely formulated urine conditioning reagent allows stabilization of DNA in urine for up to one month at ambient temperature.
- Zymo-Spin™ Column technology ensures DNA is ready for all sensitive downstream applications including qPCR, DNA-sequencing, arrays, and DNA methylation analysis.

### Get cellular or cell-free DNA, or both!







Both cellular and cell-free DNA can be effectively purified from urine using the  $Quick\text{-}DNA^{\text{\tiny{M}}}$  Urine Kit. 5 ml of urine from a healthy female donor was processed and DNA was eluted in 20  $\mu l$  final volume. 1  $\mu l$  of the sample was analyzed using a 2200 TapeStation.

### Streamlined, Innovative Workflow







Proteinase K Digestion

**DNA** Purification

Product	Cat. No.	Size
<i>Quick</i> -DNA <sup>™</sup> Urine Kit	D3061	50 preps

# **Quick-DNA™ FFPE Kit**

- Streamlined purification of high-quality FFPE tissue DNA that is ideal for PCR, Next-Generation library prep, enzymatic manipulations, etc.
- Size selection technology; recover total DNA >50 bp or >500 bp.

### Streamlined Workflow

### Deparaffinized Tissue





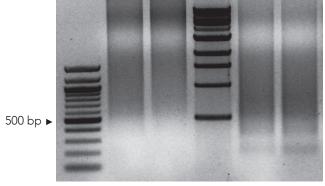
Proteinase K Digestion



Ultra-pure DNA Ready for PCR, Sequencing, etc.

### Selectable DNA Size

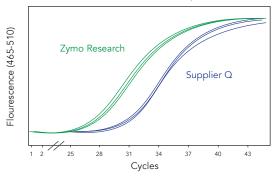
100bp DNA >500bp 1kb DNA >50 bp



Equivalent amounts of DNA resolved in a 1% agarose/TAE/EtBr gel show binding conditions may be adjusted with the  $Quick\text{-}DNA^{\intercal}$  FFPE Kit to selectively isolate DNA >50 bp or >500 bp. 100 bp DNA ladder and 1 kb DNA ladder from Zymo Research.

### Improved Recovery from FFPE Samples

### Flourescence History



Equivalent amounts of DNA isolated using Zymo Research and Supplier Q procedures were used for real time PCR analysis. DNA isolated using the Quick-DNA $^{\text{TM}}$  FFPE Kit consistently yielded lower Ct values values as depicted by the amplification curves above.

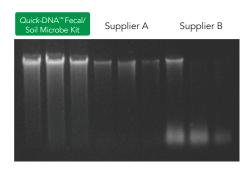
Product	Cat. No.	Size
Quick-DNA™ FFPE Kit	D3067	50 preps

# **Quick-DNA™** Environmental Kits

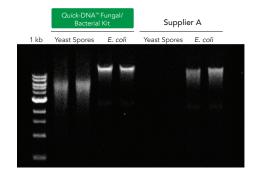
Our environmental purification kits feature unique BashingBead™ technology, allowing high-recovery of DNA from a wide variety of tough-to-lyse environmental samples. These products lead to high-yield and quality DNA suitable for sensitive downstream applications.

Our novel inhibitor removal technology, featured in our fecal/soil microbe and plant/seed kits, contains the components needed for efficient removal of polyphenolic compounds that can inhibit downstream enzymatic reactions.

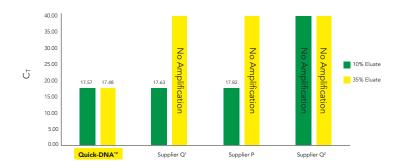
### Improved Recovery of High-quality DNA from Environmental Samples



Comparison of DNA yields from rat feces using the *Quick*-DNA™ Fecal/Soil Microbe Kit and kits from suppliers A and B. Equivalent amounts of feces were processed using each kit and then equal volumes of eluted DNA were analyzed in a 0.8% (w/v) agarose/ ethidium bromide gel. Samples were processed in triplicate.



Fungal and bacterial DNA purification. DNA isolated from *Saccharomyces cerevisiae* (spores) and *E. coli* using the *Quick*-DNA™ Fungal/Bacterial Kit is high-quality and structurally intact. Equivalent amounts of yeast and bacteria were processed using the *Quick*-DNA™ Fungal/Bacterial Kit or the kit from Supplier A. Equal volumes of eluted DNA were then analyzed in a 0.8% (w/v) agarose/ethidium bromide gel. The size marker is a 1 kb ladder (Zymo Research).



### Ultra-pure, Inhibitor-free DNA

The Quick-DNA™ Environmental Kits provide inhibitor-free DNA even when challenged with extremely inhibitor-rich samples.

Product	Cat. No.	Size
Quick-DNA™ Fecal/Soil Microbe Miniprep Kit	D6010	50 preps
Quick-DNA™ Fungal/Bacterial Miniprep Kit	D6005	50 preps
Quick-DNA™ Tissue & Insect Miniprep Kit	D6016	50 preps
Quick-DNA™ Plant/Seed Miniprep Kit	D6020	50 preps



The **BEAUTY** of **SCIENCE** is to Make Things **SIMPLE**®



