

IT 1-2-3™ Platinum Path Kit

Information Sheet



Powder



Water



Blood

See below for a complete list of sample types



Quick and Easy Sample Purification in One Universal Kit

The IT 1-2-3 Platinum Path Kit from BioFire Diagnostics provides a fast and simple method for purifying total nucleic acid from biological, environmental and food samples using one universal kit.

This kit is designed to handle dozens of different sample types, replacing the need for multiple specialized kits. In addition, it offers vast improvements and efficiencies over previous sample preparation methods.

The Platinum Path Kit purifies the following samples

Medical	Food Safety	Hazmat	Environmental
Whole Blood and Serum Nasal Culture Sputum Gastric Lymph node Pus Stool CSF	Milk Salad Ground Beef Tuna	Air in PBS Surface Powder	Air in PBS Soil Water Stool

Idaho Technology is now



DIAGNOSTICS, INC.

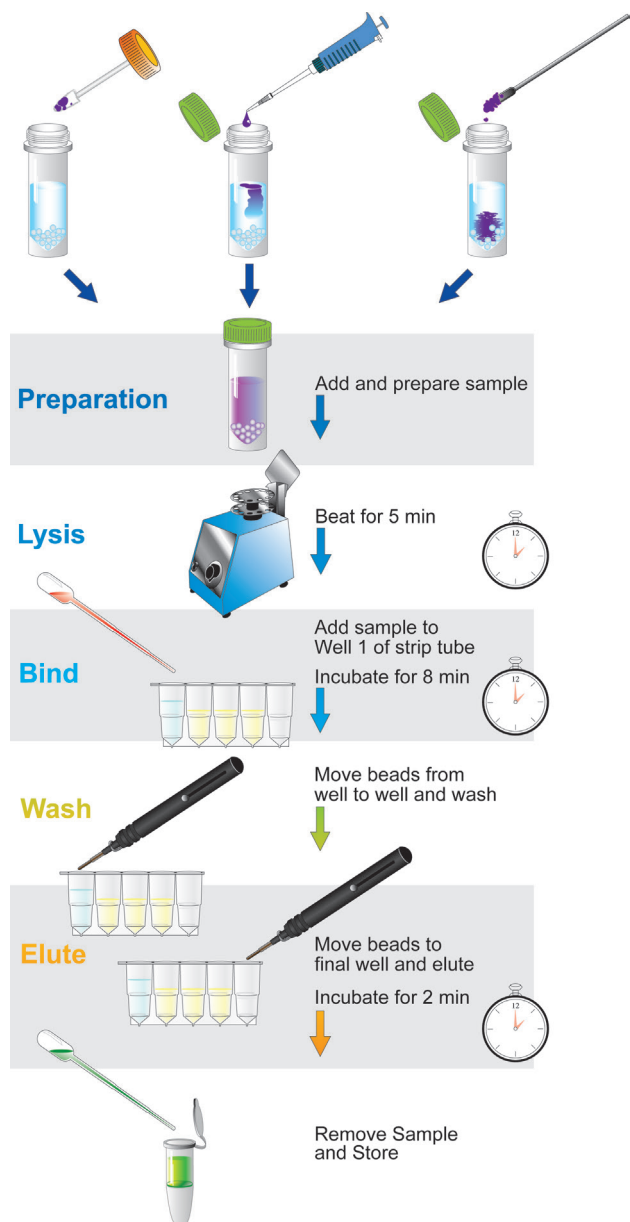
Advantages include:

- Easy to use protocols:**
 Unique sample matrix preprocessing with a common main protocol for all matrices. Purification buffers are pre-loaded in the strip tube to maximize ease of use and purification times.
- Optimized for purification of pathogens:**
 Kit is optimized to purify bacterial and viral pathogens from a wide variety of sample types.
- Minimal support equipment required.
- Small amount of waste generated.
- No hazardous goods shipping.
- No clogged spin filters.
- Clean sample ready for analysis in less than 30 minutes.

Nucleic Acid Purification

The Platinum Path Kit utilizes magnetic beads to facilitate nucleic acid purification. This approach provides a system that is fast, easy to use and requires minimal support equipment. No need for high speed centrifugation or heat blocks.

Protocol-at-a-Glance



Sample Purification involves four main steps:

1. DNA/RNA is Extracted from the sample (e.g., cells, spores, or viruses) through lysis. This is achieved by physical agitation and chemical disruption of the cells with bead-beating.
2. DNA/RNA is Bound to magnetic beads (well 1 in MagBead strip tube).
3. The DNA/RNA on the magnetic beads is Washed to remove inhibitors (wells 2-4 in MagBead strip tube).
4. The DNA/RNA is Eluted from the magnetic beads (well 5 in MagBead strip tube).

Other steps are added to increase total DNA/RNA recovered from some sample matrices. For example, a protease step is added to the whole blood and serum protocols.

Reduces Cost, Time in Training, and Footprint

The Platinum Path Extraction Kit reduces the annual extraction kit costs by 42% and represents an 80% reduction in the logistics footprint. Additionally, the Platinum Path kit reduces the training requirement by as much as 20%, while delivering increased operational effectiveness and suitability.

Equipment Required

Component
Disruptor Genie™ (SI-D237) [or Vortex-Genie® 2T (SI-T236) with Turbomix™ attachment] and adapter for 2.0 mL tubes (SI-O562) (Scientific Industries).
Pipettors (Required range: 20-800 µL) and tips
Refrigerator, 2-8°C
Peg racks (1 rack per 8 samples)
PickPen® 1-M Magnetic Wand (BioControl)
PickPen Tip box, reusable, holds 96 tips (BioControl)
Microcentrifuge capable of 2,000 x g (for sputum, stool, or soil only)

Parts List

Component	Quantity
Protocol Instruction booklet	1
MagBead Tube strips	40
Protease Module (store at 4 °C)	
FLOW Protease	1 bottle
VIBE Protease	1 bottle
Antifoam powder	1 pouch
Water	1 bottle
MB Binding Buffer	1 bottle
SCOOP Lysis Buffer	1 bottle
SCOOP PP Buffer 1	1 bottle
SCOOP PP Buffer 2	1 bottle
Small Receiver tubes	120 in a bag
Small Transfer Pipets	40 (2 bags of 20)
Medium Bead Tubes	40
Swab Snippers and Wipes	1 bag
IT Swabs	1 bag
Waste covers for strip tubes	40
Colored dots for sample tracking	1 pack

Additional Items Needed

Component
PickPen Tips (BioControl)
Food Samples Only:
Filtered blender bags (part no. ASAY-ASY-0060)
PBS packets (part no. ASAY-ASY-0061)
Scale (optional)
50 mL conical tube
Air Samples Only (DFU):
PBS packets (part no. ASAY-ASY-0061)
Triton® X-100 (part no. ASAY-ASY-0062)
Stool Only:
Cary-Blair Transport Media (part no. ASAY-ASY-0063)
Stool concentrators (part no. ASAY-ASY-0064)