



Thermo Scientific KingFisher Family
Nucleic Acid Purification System



pure flexibility

unparalleled performance

- Use variety of starting material
- Get extremely high yield and quality
- Increase your productivity and efficiency

Thermo
SCIENTIFIC

ensure sample purity

The accuracy of your results depends on high-quality, reproducible purification of nucleic acid, protein and cell samples. Thermo Scientific KingFisher purification systems, now featuring dedicated Thermo Scientific KingFisher Kits for nucleic acid purification, deliver unparalleled purification in an optimized workflow.

- Choose from four distinct systems the match for your applications and throughput.
- Optimized kits to complete the unique nucleic acid purification workflow for a wide variety of sample types
- Thermo Scientific BindIt software increase flexibility to customize protocols
- Thermo Scientific specially designed consumables for efficient sample processing



instant benefits in productivity

Notice an immediate difference with KingFisher system. You will purify samples at speeds never thought possible, with minimal hands-on time as the automation takes over. KingFisher system frees you to concentrate on more involved downstream analyses.



KingFisher purification processing uses advanced magnetic particle technology to deliver up to 96 samples every 15mins (depending on application).

Out-of-the-box solutions available to add flexibility and enhance your workflow. Visit our applications library www.thermoscientific.com/kingfisher

KingFisher purification technology ensures impurities are removed; improved sample quality leads to better downstream analyses. Resulting DNA and RNA is free of protein, nucleases and other contaminants.

Wide range of starting material (blood, e.g.serum, cell culture, tissue, bacteria, plant) and sample input volumes.

complete nucleic acid purification

KingFisher Instruments with patented technology uses magnetic rods to move particles through purification phases of binding, washing and elution to yield high purity DNA and RNA. Our magnetic beads feature the high surface area, uniform size and excellent suspension stability that are ideal for automated processing.

BindIt Software gives you flexibility. Modify prewritten protocols or create your own to handle more applications. You can interface KingFisher Flex instrument with liquid handling, robotics and plate-stacking instruments to fully automate your workflow for higher throughput.

KingFisher Kits handle routine to advanced requirements, covering a broad range of sample types. Select kits for blood DNA, total RNA, cell and tissue DNA, viral NA, and plant DNA. Each is optimized for highest performance with KingFisher instruments. Use them for typical downstream analysis, including: PCR/qPCR, sequencing, hybridization techniques and enzymatic applications.

KingFisher consumables, made of polypropylene, are ideal for magnetic particle processing due to their low binding affinity for biomolecules. Both the yield and the quality of the isolated DNA/RNA are significantly improved with special KingFisher plates and tips.

limitless applications

KingFisher systems provides the flexibility researchers require to meet evolving needs. The system includes numerous prewritten protocols for many applications. You can also customize existing protocols and create new ones for protein and cell applications. Magnetic bead technology enables number of protein

applications e.g. recombinant protein or glycoprotein purification, peptide fractionation and protein phosphorylation. Also variety of cell isolation applications can be automated including cancer or white blood cell isolation and bacterial cell separation.

Total Thermo Scientific Nucleic Acid Purification and Analysis Workflow

Liquid Handling



Thermo Scientific Versette automated liquid handling system for sample and reagent dispensing

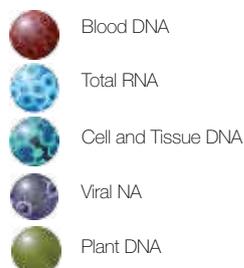


Thermo Scientific Multidrop Combi automated dispensing for plate filling

DNA/RNA purification



Thermo Scientific KingFisher Kit reagents for purifying DNA/RNA



Thermo Scientific KingFisher family of magnetic particle processors

Build your own workflow - find the products at thermoscientific.com

unparalleled performance

KingFisher systems delivers excellent performance and reproducible results. Your purified nucleic acid, protein and isolated cells are ready for downstream analyses. KingFisher systems isolates DNA, RNA and protein in significant quantities from a variety of material sources, including cellfree body fluids, blood, bacteria, cell culture, tissue, various and plant tissue. Automation eliminates cross-contamination and reagent cross-over and the magnetic bead separation technology ensures high-quality DNA, RNA and protein.

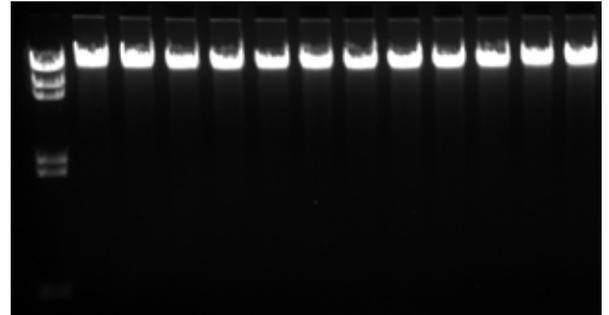


Figure Blood: High yield of genomic DNA was purified from Blood samples by using KingFisher Blood DNA Kit and KingFisher Flex instrument. The band on the agarose gel is clear and there is no smear indicating that gDNA is pure and undegraded.

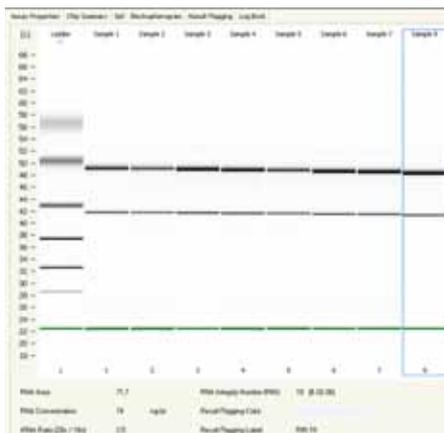


Figure RNA: Total RNA purified from HeLa-S3 cells with KingFisher Total RNA Kit and KingFisher Flex instrument show consistency and good quality of purified RNA. The RNA integrity number (RIN) of the samples was 10, indicating that RNA was intact in all of the samples.

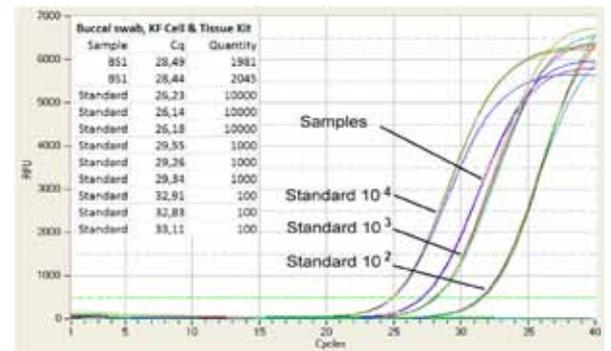


Figure Buccal: KingFisher Cell and Tissue Kit together with KingFisher Duo instrument was used to purify DNA from buccal swabs. The results from the qPCR performed with Thermo Scientific PikoReal qPCR instrument indicate excellent yield and purity of DNA.

DNA/RNA analysis



Thermo Scientific NanoDrop series of small volume UV-Vis spectrophotometers



Thermo Scientific Multiskan GO UV-Vis cuvette- and plate spectrophotometers

PCR/qPCR



Thermo Scientific Piko Thermal Cycler for PCR applications



Thermo Scientific PikoReal Real-Time PCR System for qPCR applications



or contact your local sales representative!

meet the KingFisher family

Our revolutionary patented magnetic separation technology lets you process virtually any sample from any source for the ultimate in isolation of nucleic acids, proteins and cells. With four systems to choose from, Thermo Scientific KingFisher systems provides the performance, flexibility and speed for your budget, application and throughput requirements.

KingFisher Flex: With high-throughput or processing volume up to 5 ml, Flex system offers truly versatile purification of **nucleic acids and proteins**. The range of volumes 20-5000 μ l depending on the magnet head with 96- or 24-well format. Use predefined protocols or customize your own for special applications.



KingFisher Duo: New to the KingFisher family, Duo system delivers advanced functionality in a compact, mid-throughput capacity instrument for isolation applications. Its small footprint and big functionality, including traceability and data management, make it a perfect fit for research and routine laboratories. Two protocols can run sequentially without interruption, raising throughput up to 24 samples per load. Duo system includes also large volume processing up to 5 ml.



KingFisher mL: The economical choice for easy operation up to 15 samples. Processing volumes from 50 to 1000 μ l carried out tube strips.



KingFisher: The first in the family, KingFisher system allows to purify small-scale samples economically. Run up to 24 samples in 20-200 μ l. All purification and processing steps, programmed using simple push-button operation, are carried out in microstrips.

KingFisher Kits: Now, with optimized Thermo Scientific KingFisher purification kits, you can easily perform blood DNA, total RNA, cell and tissue DNA, viral NA and plant DNA extraction. KingFisher instruments, software, kits and consumables deliver unparalleled performance.



Instrument	Flex		Duo		mL	KF
Samples/run	96	24	12(24)	6	15	24
Working volume	20-1000	200-5000	30-1000	200-5000	50-1000	20-200

Ordering information

KingFisher instruments

5400000	KingFisher, 100-240 V, 50/60 Hz
5400050	KingFisher mL, 100-240 V, 50/60 Hz
5400100	KingFisher Duo, 100-240 V, 50/60 Hz
5400610	KingFisher Flex with 96 PCR head, 100-240 V, 50/60 Hz
5400620	KingFisher Flex with 96 KF head, 100-240 V, 50/60 Hz
5400630	KingFisher Flex with 96 deep well head, 100-240 V, 50/60 Hz
5400640	KingFisher Flex with 24 deep well head, 100-240 V, 50/60 Hz

Consumables for KingFisher

97002070	KingFisher tip comb, 50 pcs
97002080	KingFisher plate 100 µl, 50 pcs
97002084	KingFisher plate 200 ul, 50 pcs

Consumables for KingFisher mL

97002111	KingFisher mL tip comb, 800 pcs
97002121	KingFisher mL tube, 900 pcs
97002141	KingFisher mL Combi 240, (tubes and tip combs for 240 samples)

Consumables for KingFisher Duo

97003500	KingFisher Duo 12-tip comb, for Microtiter 96 Deepwell plate, 50 pcs
95040450	Microtiter Deepwell 96 Plate, 50 pcs
97003510	KingFisher Duo 6-tip combs, for KingFisher Flex 24 Deepwell plate, 48 pcs
95040470	KingFisher Flex 24 Deep Well Plate, 50 pcs
97003520	KingFisher Duo elution strip, 40 pcs
97003530	KingFisher Duo Combi pack for Microtiter 96 Deepwell plate (tips combs, plates and elution strips for 96 samples)

Consumables for KingFisher Flex

97002514	KingFisher 96 tip comb for PCR magnets, 80 pcs
97002524	KingFisher 96 tip comb for KF 96 magnets, 100 pcs
97002534	KingFisher 96 tip comb for KF 96 magnets, 100 pcs
97002540	KingFisher 96 KF plate, 48 pcs
95040450	Microtiter Deepwell 96 Plate, 50 pcs
95040460	Microtiter Deepwell 96 Plate, sterile, 50 pcs
97002610	KingFisher Flex 24 deep well tip comb and plate, 50 pcs of each
95040470	KingFisher Flex 24 Deep Well Plate, 50 pcs
95040480	KingFisher Flex 24 Deep Well Plate Sterile, 50 pcs
9503230	Cap Mat for DW 96 Plate, 50 pcs
9503233	Cap Mat for DW 96 Plate, sterile, 25 pcs

KingFisher Kits

97010060	KingFisher Blood DNA kit for KingFisher mL, 60 preps
97010196	KingFisher Blood DNA kit for KingFisher Duo and KingFisher Flex, 96 preps
97020060	KingFisher Total RNA kit for KingFisher mL, 60 preps
97020196	KingFisher Total RNA kit for KingFisher Duo and KingFisher Flex, 96 preps
97030060	KingFisher Cell and Tissue DNA kit for KingFisher mL, 60 preps
97030196	KingFisher Cell and Tissue DNA kit for KingFisher Duo and KingFisher Flex, 96 preps
97040060	KingFisher Viral NA kit for KingFisher mL, 60 preps
97040196	KingFisher Viral NA kit for KingFisher Duo and KingFisher Flex, 96 preps
97050196	KingFisher Plant DNA kit for KingFisher Duo and KingFisher Flex, 96 preps

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