






A complete guide to automated sample preparation

KingFisher instruments and optimized kits and reagents for isolation of DNA, RNA, proteins, and cells

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Introduction to KingFisher instruments



Consistent

The unique instrument design, moving magnetic beads instead of liquids, enables cleaner extractions and consistent results with every run



Convenient

Easy to set up and run, or customize to fit your lab's needs



Versatile

Enables more applications than any other sample preparation instrument



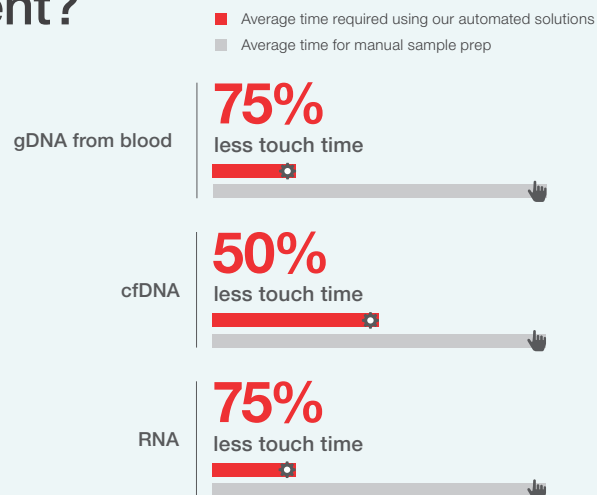
Supported

Backed by the industry's largest network of specialists dedicated to supporting these instruments

Why choose a KingFisher instrument?

Your samples, faster

Thermo Scientific™ KingFisher™ instruments help save you valuable time by removing manual steps and reducing overall processing time.



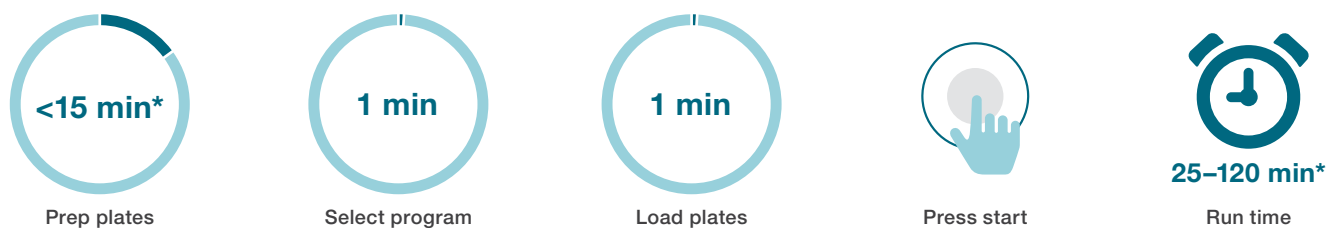
Your samples, consistently

KingFisher instruments help reduce user processing errors while increasing the reproducibility of your results. Our data show that samples processed with KingFisher instruments have consistent results across runs and different users, which is important for more sensitive downstream applications such as qPCR, next-generation sequencing (NGS), digital PCR, and mass spectrometry.

Your samples, more easily

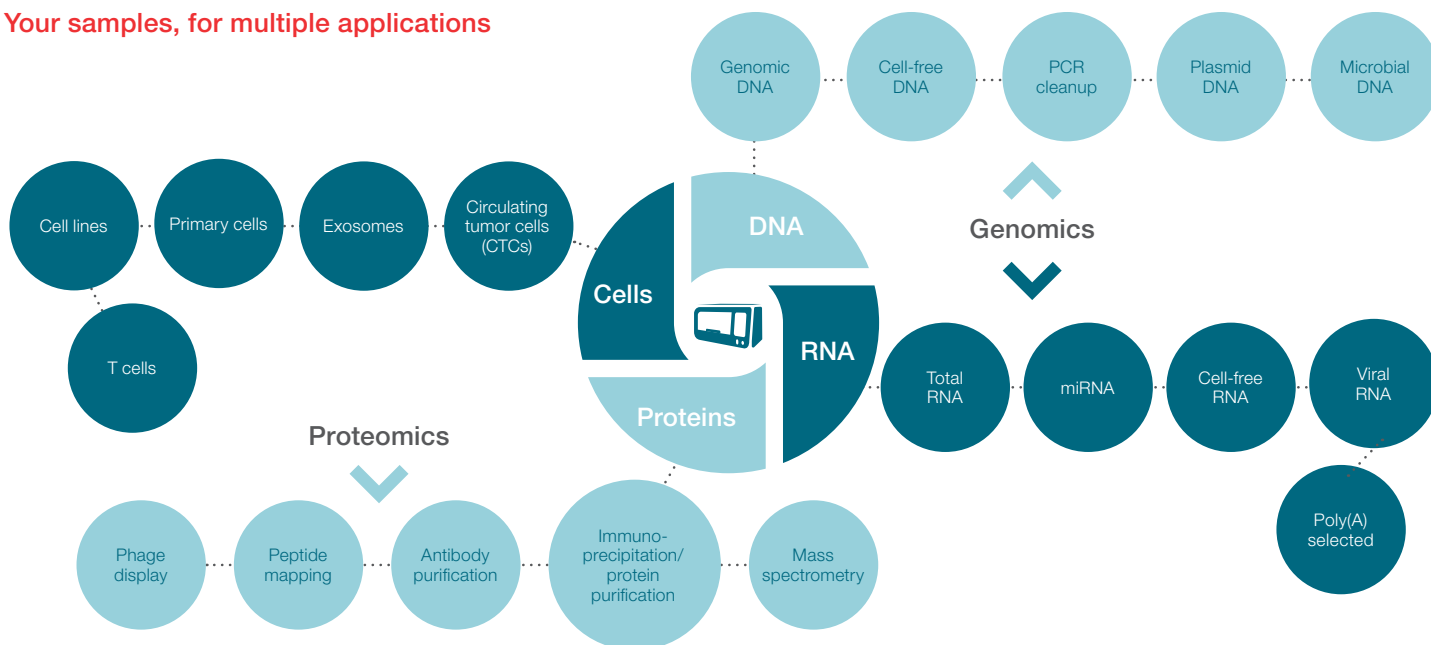
KingFisher instruments offer optimized, easy-to-follow protocols for nearly every downstream application or sample type.

Typical run with KingFisher magnetic particle processing instruments



* Reagent and sample preparation time are dependent upon user and workflow needs. Run time can vary depending upon application and instrument.

Your samples, for multiple applications



The KingFisher instrument experience

A complete system to automate sample preparation in your lab



Instrument

Select a KingFisher instrument based on your sample throughput and application needs



Kits and reagents

Choose kits and reagents from trusted brands, such as Applied Biosystems™ MagMAX™ kits and Invitrogen™ Dynabeads™ magnetic beads and reagents



Customize

Use plastics, software, and interchangeable magnetic heads to customize and optimize your process

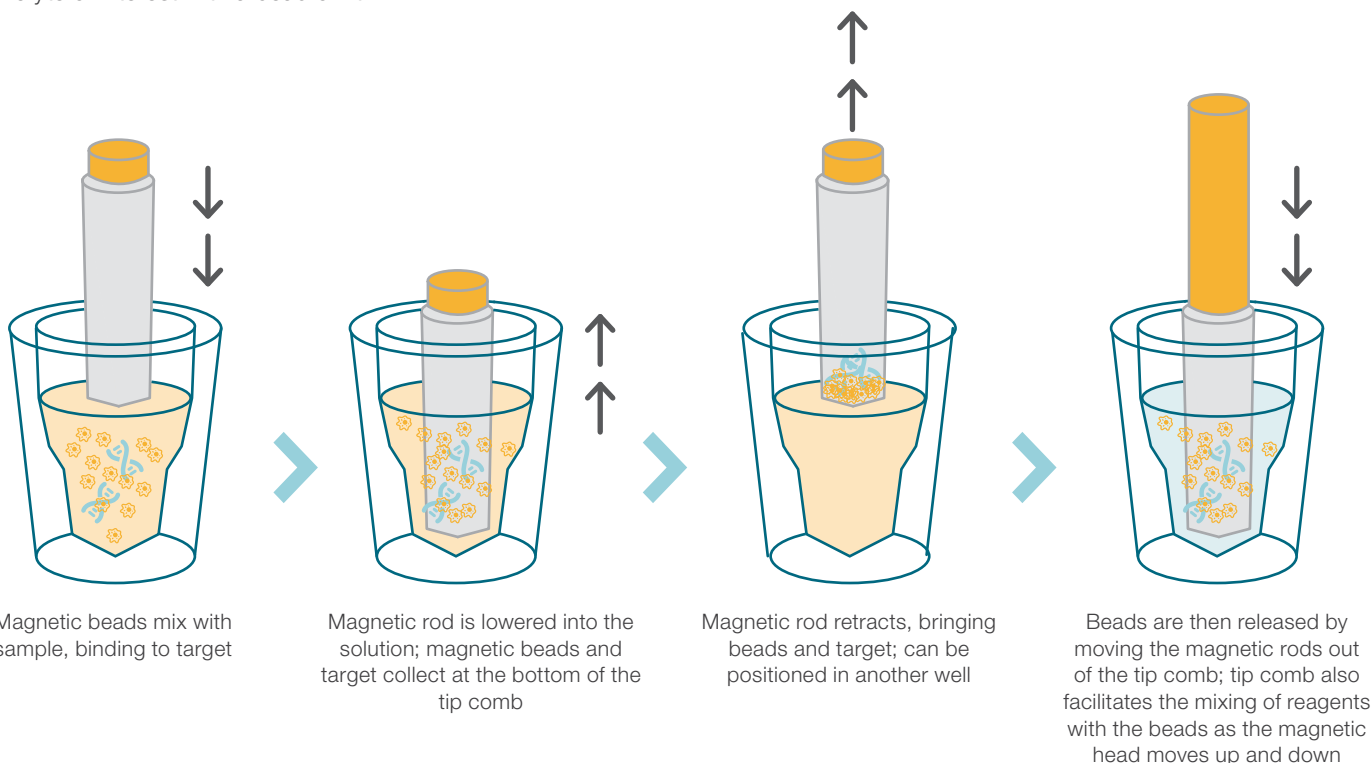


Support

Contact dedicated KingFisher instrument specialists for application and instrument support

How KingFisher magnetic particle processing instruments work

KingFisher magnetic particle processing instruments provide simple automation for benchtop or integrated extraction of DNA, RNA, protein, and cells by moving magnetic beads (not liquids), leading to clean extractions and enabling consistent results. Using an easy process (bind, wash, elute), KingFisher instruments can automate the extraction of any analyte of interest with a bead on it.



KingFisher magnetic particle processing instruments

KingFisher instruments are versatile sample preparation instruments in the lab, and are elegantly designed to support multiple applications.

- **Various throughputs**—process 6–96 samples per run depending on the instrument model
- **Interchangeable formats**—choose 24- or 96-well plates so you can process a wide range of input volumes
- **Protocol customization**—easily edit, modify, or create new protocols (touchscreen enabled for Thermo Scientific™ KingFisher™ Apex instrument only)
- **Optimized reagents**—compatible with multiple magnetic-bead reagents
- **Barcoded plastics**—achieve optimal performance with specially designed plastics (for KingFisher Apex instrument only)

Test a KingFisher platform in your lab

Specialists supporting the KingFisher instrument can provide an on-site demonstration of the system with your samples. They provide the instrument, consumables, and reagents from Thermo Fisher Scientific that are specific to your research needs. The demonstration includes instrument setup and use, protocol modification, and other FAQs. Find out more at thermofisher.com/kingfisherdemo

Find a model that meets your needs



KingFisher instrument:	Duo Prime	Flex	Apex	Presto
Instrument size	Compact benchtop	Benchtop	Benchtop	Benchtop—integrates with robotic liquid handler
Throughput level	Low to medium	High	High	Ultrahigh
Processing volume range	<ul style="list-style-type: none"> • 50–1,000 µL: 12-pin magnet head • 200–5,000 µL: 6-pin magnet head 	<ul style="list-style-type: none"> • PCR plate (20–100 µL*), skirted • 20–200 µL: 96-well plate • 50–1,000 µL: 96 deep-well plate • 200–5,000 µL: 24 deep-well plate 	<ul style="list-style-type: none"> • 15–1,000 µL: 96 deep-well plate • 15–200 µL: 96-well KingFisher standard plate • 10–80 µL: 96-well PCR plate • 30–5,000 µL: 24 deep-well plate • 30–200 µL: 96 storage tubes • 200–1,000 µL: 24 storage tubes 	<ul style="list-style-type: none"> • 50–1,000 µL: 96 deep-well plate • 200–5,000 µL: 24 deep-well plate • 50–150 µL: KingFisher 96 plate
Samples per run	6 or 12	24 or 96	24 or 96	24 or 96
Customizable protocols	Yes	Yes	Yes, with touchscreen or PC software	Yes
Heating/cooling	<ul style="list-style-type: none"> • 10°C to 75°C (plate row block A) • 4°C to 75°C (elution strip block) 	From 5°C above ambient temperature to 115°C	<ul style="list-style-type: none"> • From 4°C above ambient temperature to 100°C • Cooling down to 4°C 	From 5°C above ambient temperature to 115°C
Ultraviolet lamp	8 watts (up to 16 hr)	No	2 UV lamps, max 23 h 59 min	No
Regulatory statement	For Research Use Only.	For Laboratory Use.	For Laboratory Use.	For Laboratory Use.

* Or similar skirted PCR plate.

Automate your maxi-scale plasmid purification using column-based technology on the Thermo Scientific™ KingFisher™ PlasmidPro instrument with prefilled cartridges. Learn more at thermofisher.com/plasmidpro



KingFisher Apex system

The newest in KingFisher sample purification technology





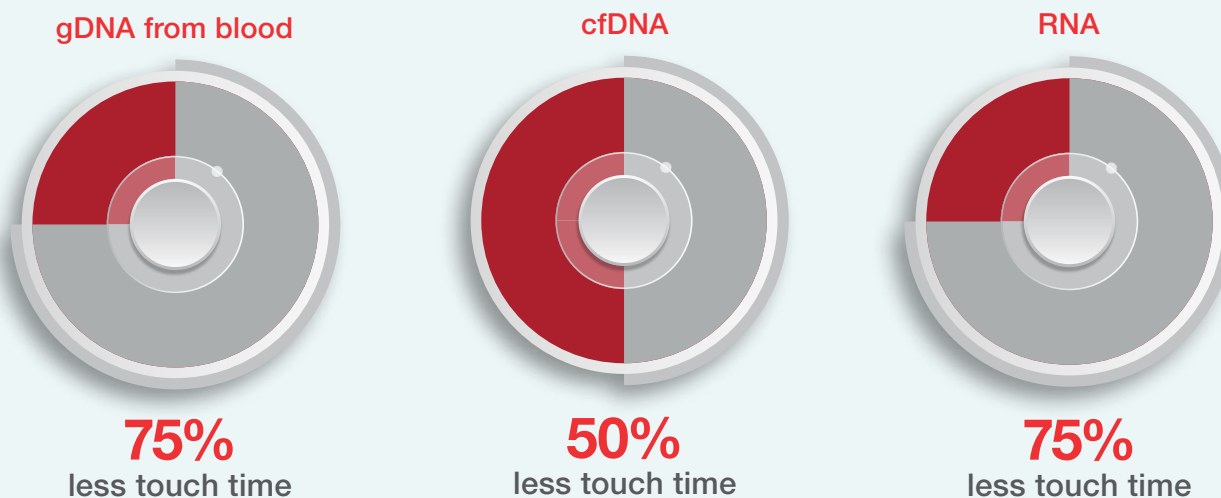
Enhanced performance

Follow the on-screen instructions (including color-guided plate loading) and start your first run in <15 minutes. Achieve peak performance for purifying DNA, RNA, proteins, or cells, now with even greater flexibility for fast and reproducible results with almost any application.

- Elute in volumes down to 10 μL when using Thermo Scientific™ KingFisher™ Combi tip combs and plastics for demanding downstream applications*
- Purify 1–96 samples per run in 25–65 minutes
- Control heating and cooling to maintain sample integrity
- Elute into PCR-compatible storage tubes and revisit samples later
- Safeguard against contamination with two UV lights

* Please reach out to your local sales specialist for support in small-volume elution.

Sample prep as it should be—fast, flexible, consistent**



** Based on actual extraction times in lab.

■ Average time required using our automated solutions

■ Average time for manual sample prep

Featured instrument applications

To ensure compliance with regulatory requirements, please select the appropriate products suitable to your laboratory's needs.

Cancer research

Cell-free nucleic acid isolation

These kits rapidly purify nucleic acids from cell-free samples for liquid biopsy research. They are optimized specifically for enrichment of cell-free DNA (cfDNA) and cell-free total nucleic acid (cfTNA) and minimize gDNA carryover, which means increased recovery of nucleic acids with sample and eluate volume flexibility. Elute in volumes compatible with Ion Torrent™ Oncomine™ assays.

Sample workflow

Sample collection



Sample

Sample purification



MagMAX cfDNA
and cfTNA kits and
KingFisher instrument

Library prep and sequencing



Oncomine Focus DNA and RNA assays
on the Genexus sequencer,
Ion Chef or Ion GeneStudio S5 systems,
or other NGS platforms

Analysis



Torrent Suite, Ion Reporter,
or Oncomine Reporter
Software

Recommended kits



cfDNA

Applied Biosystems™ MagMAX™ Cell-Free DNA Isolation Kit

	Sample type	Serum, plasma, urine, and saliva
	Sample input volume	0.5–5 mL plasma, 0.1–10 mL serum, 10 mL of urine
	Yield	40–50 ng from 4 mL plasma
	Elution volume	15–50 µL
	Total processing time	45–55 min total (10–15 min hands-on time)
	Reactions (rxn)	50 rxn for 2 mL plasma input 25 rxn for 4 mL plasma input
	Cat. No.	A29319

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cfTNA

Applied Biosystems™ MagMAX™ Cell-Free Total Nucleic Acid Isolation Kit

	Sample type	Serum and plasma
	Sample input volume	1–6 mL plasma
	Yield	Up to 50 ng DNA from 4 mL and 5–100 pg from 10 mL of sample input
	Elution volume	15–60 µL
	Total processing time	45–55 min total (10–15 min hands-on time)
	Reactions (rxn)	50 rxn for 2 mL plasma input 25 rxn for 4 mL plasma input
	Cat. No.	A36716

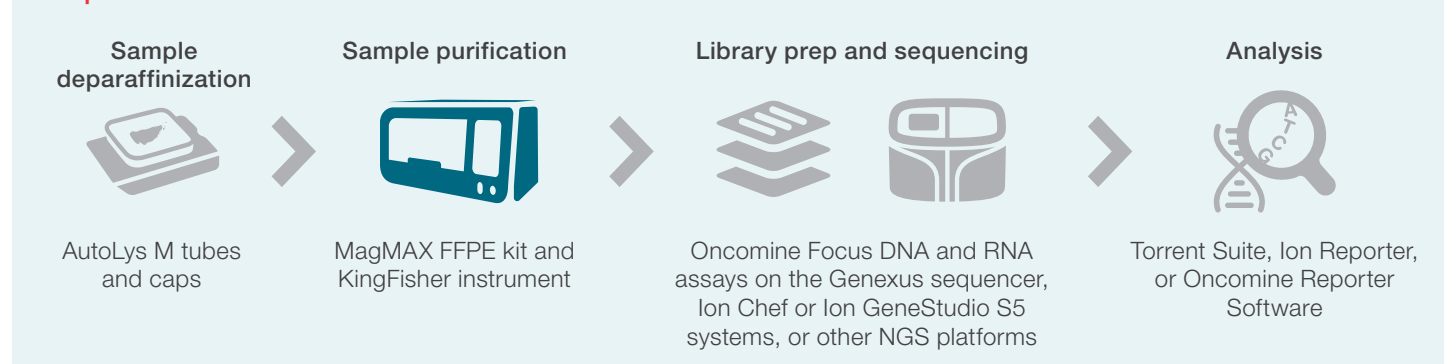
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Find out more at thermofisher.com/cfdnaisolation

Formalin-fixed, paraffin-embedded (FFPE) samples for cancer research

Sequentially isolate DNA and RNA from FFPE samples and get high-quality genomic DNA and total RNA yields comparable to fresh-frozen blood.

Sample workflow



Recommended kits



Applied Biosystems™ MagMAX™ FFPE DNA/RNA Ultra Kit

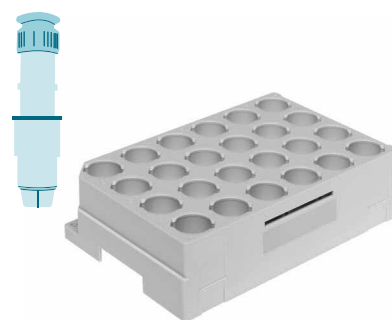
	Sample type	FFPE tissue samples, such as resections, biopsies, and aspirates
	Sample input volume	5–40 µm standard input of slides or curls
	Elution volume	20–50 µL
	Total processing time	20 min for DNA, 48 min for RNA
	Reactions (rxn)	96 isolations (48 RNA and 48 DNA, or 96 DNA or 96 RNA)
	Cat. No.	A31881

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AutoLys M tubes and caps deparaffinization workflow

Speed up your deparaffinization process with Applied Biosystems™ AutoLys M tubes and caps. Composed of pretreated tubes and a rack to help reduce pipetting steps, the workflow eliminates the need for hazardous chemicals and helps minimize loss of tissue sample by eliminating tedious pelleting techniques.

Note: Not included with the MagMAX FFPE DNA/RNA Ultra Kit.

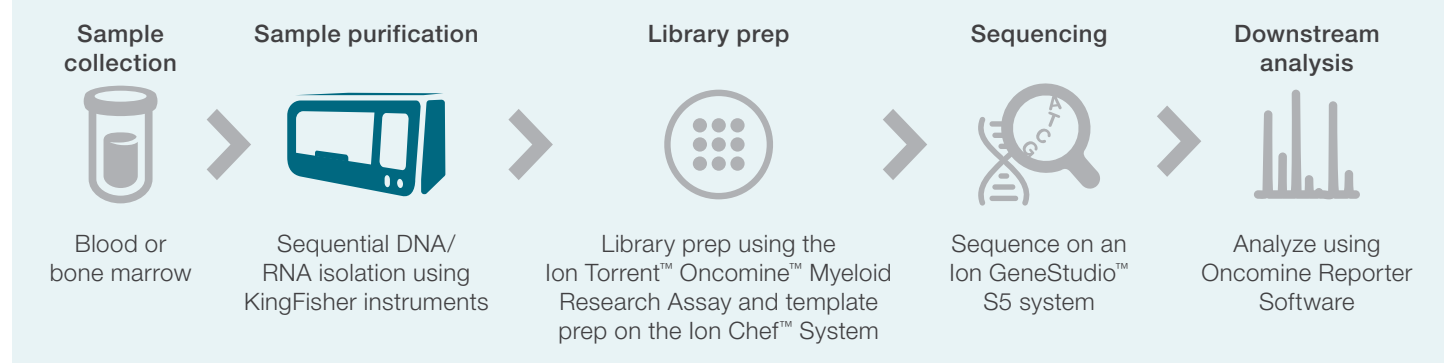


Find out more at thermofisher.com/ffpeisolation

Hematologic cancer research

Sequentially isolate high-quality genomic DNA and total RNA from a single whole blood or bone marrow sample. This process helps maximize your nucleic acid yields from precious samples with separate, ready-to-use eluates for a broad range of downstream applications.

Sample workflow



Recommended kits



Applied Biosystems™ MagMAX™ Sequential DNA/RNA Kit

Sample type	Whole blood and bone marrow
Sample input volume	Bone marrow: 50–500 µL Whole blood: 100–500 µL Maximum of 15,000 WBC per µL
Elution volume	96 deep-well format DNA: 100 µL RNA: 80 µL 24 deep-well format DNA: 200–500 µL RNA: 100–150 µL
Total processing time	Total turnaround time ~2.5 hours (DNA and RNA) with ~45 minutes of hands-on time
Reactions (rxn)	100 rxn
Cat. No.	A65309; large stand-alone bottle also sold separately (see web page)

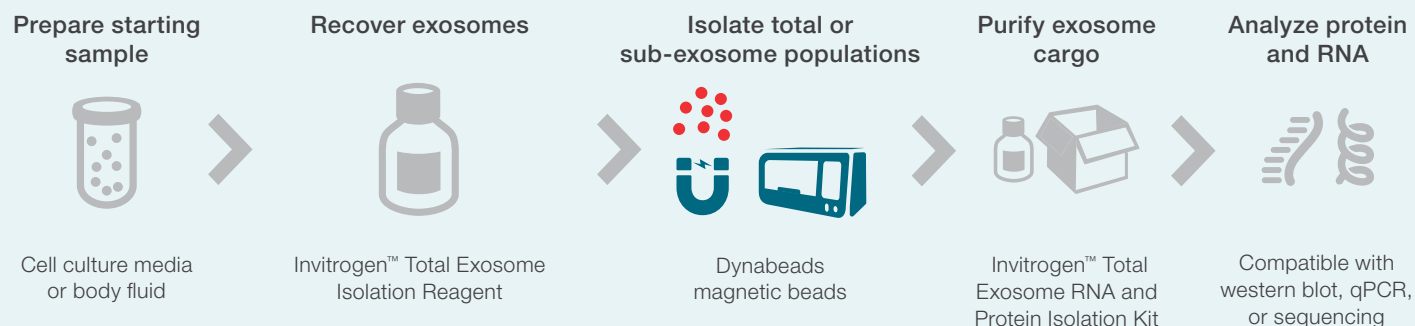
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Find out more at thermofisher.com/magmaxsequential

Exosome and organelle isolation

Dynabeads products provide an efficient method for exosome isolation from liquid biopsy samples, enabling the characterization and analysis of their RNA and protein content for research applications.

Sample workflow



Ordering information

Product*	Quantity	Cat. No.
Total exosome isolation reagent (precipitation technology)		
Total exosome isolation reagent (from cell culture media)	50 mL	4478359
Total exosome isolation reagent (from serum)	6 mL	4478360
Total exosome isolation kit (from plasma)	6 mL	4484450
Total exosome isolation reagent (from urine)	50 mL	4484452
Total exosome isolation reagent (from other body fluids)	6 mL	4484453
Subpopulation isolation and detection (magnetic bead technology)		
DynaGreen CaptureSelect Anti-IgG-Fc (Multi-Species) Magnetic Beads	3 mL	80108G
Exosome-Human CD9 Isolation Reagent	2 mL	10614D
Exosome-Human CD9 Flow Detection Reagent	2 mL	10620D
Exosome-Human CD63 Isolation/Detection Reagent	3 mL	10606D
Exosome-Human CD81 Isolation Reagent	2 mL	10616D
Exosome-Human CD81 Flow Detection Reagent	2 mL	10622D
Exosome-Human EpCAM Isolation Reagent	2 mL	10618D
Exosome-Human EpCAM Flow Detection Reagent	2 mL	10624D
Exosome-Streptavidin Isolation/Detection Reagent	3 mL	10608D
RNA and protein extraction		
Total Exosome RNA & Protein Isolation Kit	40 preps	4478545
Generic exosome enrichment		
Dynabeads Intact Virus Enrichment	100 rxns	10700D

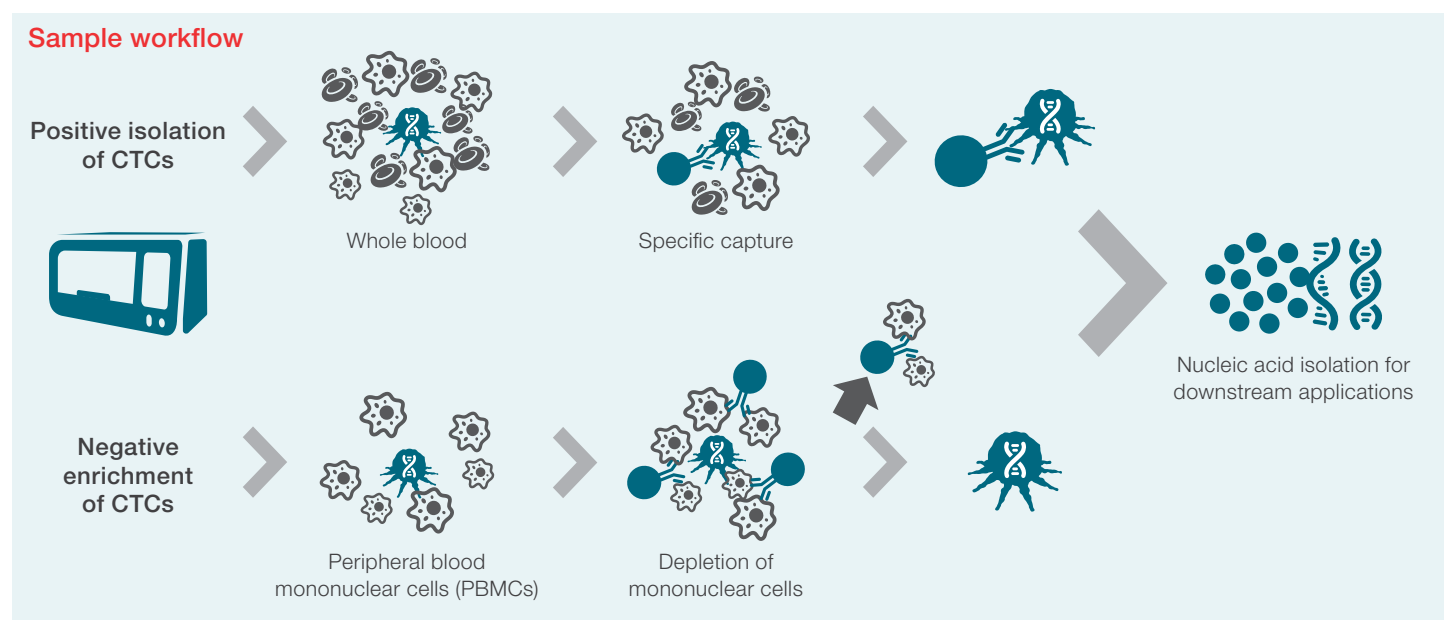
* This table shows our range of products for exosome purification.

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Find out more at thermofisher.com/exosomes

Circulating tumor cell (CTC) isolation

CTCs are gaining importance as prognostic markers and for monitoring treatment response. Because of the low number of CTCs in circulation, highly sensitive methods are necessary to capture and detect down to single cells. Dynabeads magnetic bead products provide an automation-friendly tool for isolating circulating biomarkers.



Ordering information

Product	Quantity	Cat. No.
Positive isolation of CTCs		
Dynabeads Epithelial Enrich**	5 mL	16102
CELLlection Epithelial Enrich Kit, with Dynabeads magnetic beads**	5 mL	16203
Dynabeads MyOne Streptavidin T1**	2 mL, 10 mL, 50 mL	65601, 65602, 65604D
Negative enrichment/depletion of CTCs		
Dynabeads MyOne CD45 Leukocyte Depletion**	2 mL, 10 mL	11170D, 11171D
Dynabeads CD45**	5 mL	11153D
Streptavidin beads for custom applications*		
Dynabeads M-270 Streptavidin**	2 mL, 10 mL	65305, 65306
Dynabeads M-280 Streptavidin**	2 mL, 10 mL, 100 mL	11205D, 11206D, 60210
Dynabeads MyOne Streptavidin T1**	2 mL, 10 mL, 50 mL	65601, 65602, 65604D
Dynabeads MyOne Streptavidin C1**	2 mL, 10 mL	65001, 65002
Surface-activated beads for antibody coupling*		
Dynabeads M-270 Epoxy**	60 mg, 300 mg	14301, 14302D
Dynabeads M-270 Carboxylic Acid**	2 mL, 10 mL	14305D, 14306D
Dynabeads M-270 Amine**	2 mL, 10 mL	14307D, 14308D
Dynabeads MyOne Epoxy, for OEM and industrial use only†	1 g, 10 g	34001D, 34002D
Dynabeads MyOne Tosylactivated**	2 mL, 10 mL	65501, 65502

* In combination with antibodies or biotinylated antibodies for streptavidin or surface-activated beads, respectively.

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† Caution: For use as a raw material in further manufacturing applications.

Genetic testing

Nucleic acid isolation

Extract high-quality DNA that is compatible with sequencing or array platforms, from a range of sample types. Choose from multiple protocols.

Sample workflow

Sample collection



Compatible with multiple sample types



Sample purification



MagMAX DNA Multi-Sample Ultra 2.0 Kit and KingFisher instrument



Analysis










Compatible with multiple downstream applications

- qPCR
- Sequencing (NGS or CE platform)
- Array
- Digital PCR

Recommended kits



Applied Biosystems™ MagMAX™ DNA Multi-Sample Ultra 2.0 Kit

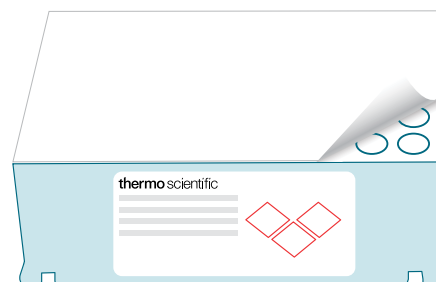
 Sample type	Multiple, including whole blood, bone marrow, saliva, buffy coat, swabs, cultured cells, tissue, and blood cards
 Sample input volume	50 µL–10 mL*
 Yield	1.5–4 µg (50 µL of blood) 2–12 µg (1 buccal swab)
 Elution volume	50 µL–1 mL
 Total processing time	6–96 samples in 30–45 min depending on sample type
 Reactions (rxn)	1 kit = 100 rxn of 50–400 µL volume or 200 rxn of <200 µL volume; bulk reagents sold separately
 Cat. No.	A36570

* Sample input volume ranges depending on sample type.

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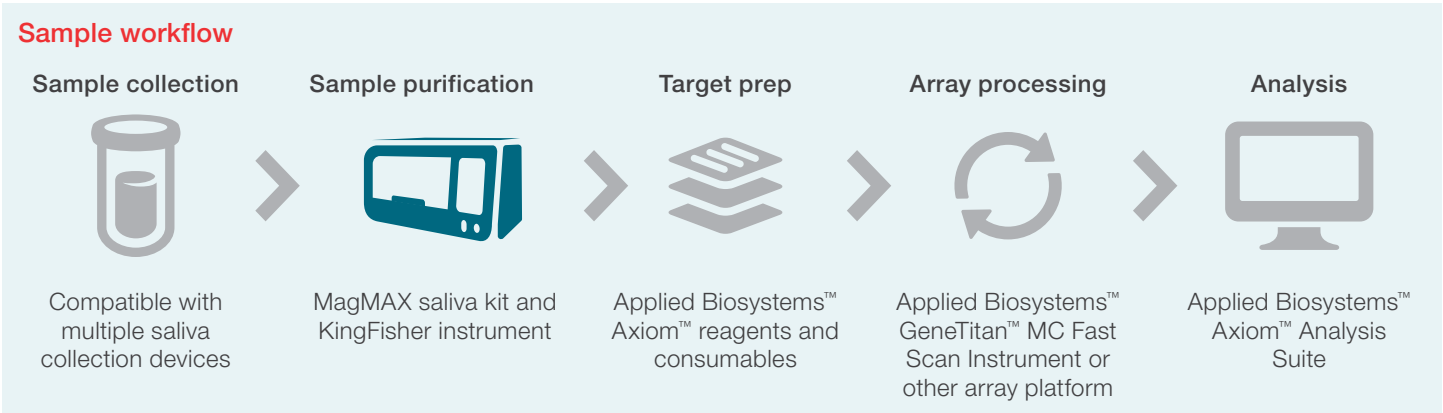
KingFisher instrument-ready reagents

Reduce your pipetting steps with prefilled reagent plates for Thermo Scientific™ KingFisher™ Duo Prime and Thermo Scientific™ KingFisher™ Flex instruments. Now, MagMAX DNA Multi-Sample Ultra 2.0 isolation reagents come prefilled into the plates that go in the KingFisher instrument. Just peel off the plate cover, add lysed samples, and load plates onto the instrument. Find out more at thermofisher.com/kingfisherready



Find out more at thermofisher.com/magmaxultra and thermofisher.com/kingfisherready

Speed up your processing of saliva samples for genetic testing. Recover DNA that is compatible with NGS and array platforms, from 96 samples, in 25 minutes.



Recommended kits



Applied Biosystems™ MagMAX™ Saliva gDNA Isolation Kit

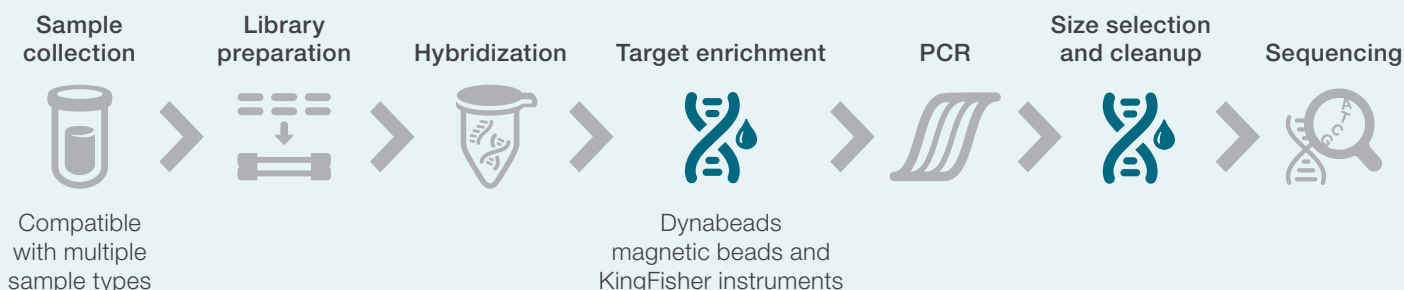
	Sample type	Fresh and stabilized saliva
	Sample input volume	200 µL–2 mL
	Yield	100 ng/µL saliva on average (yield is dependent on each individual donor)
	Elution volume	50 µL
	Total processing time	25 min (5 min hands-on time)
	Reactions (rxn)	100 rxn 500 rxn
	Cat. No.	A39059, A39060

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Library preparation

Improve sensitivity, simplify processes, and increase efficiency with optimized magnetic bead solutions for next-generation sequencing (NGS) library preparation.

Sample workflow



Target enrichment

- High sensitivity and reproducibility
- Excellent binding capacity
- Enhanced library concentrations and sequencing coverage

Size selection and cleanup

- High yield from cleanup recovery
- Efficient fragment removal
- Ambient temperature storage for up to 18 months

Recommended stand-alone magnetic beads



Invitrogen™ Dynabeads™ Streptavidin for Target Enrichment

	Sample type	Swabs, urine, plasma, whole blood, cells, and more
	Concentration	10 mg/mL
	Uniformity	Monosized 1 µm (CV <5%)
	Cat. No.	65605D, 65606D, 65607D

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Applied Biosystems™ MagMAX™ Pure Bind Beads

	Sample type	All PCR products
	Sample input volume	Flexible
	Yield	>90% recovery of DNA fragments larger than 90 bp; efficient removal of fragments <90 bp
	Total processing time	30 min
	Cat. No.	A58521, A58522, A58523

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Find out more at thermofisher.com/streptavidinbeads and thermofisher.com/magmaxpurebind

Infectious disease and microbiome research

Sample workflow

Sample collection



Compatible with multiple sample types



Sample purification



MagMAX Prime Viral/Pathogen and MagMAX Microbiome nucleic acid isolation kits and KingFisher instrument



Analysis



Compatible with multiple downstream molecular applications



- Viral/pathogen research
- qPCR
- Microbiome testing
- Sequencing
- Digital PCR

Virus and pathogen detection

- **Recovery**—compatible with low-titer samples
- **No carrier required**—less interference with NGS and fewer steps required

Microbiome research

- Enzyme-based digestion
- Recover from a wide range of microorganisms without additional processing steps








Nucleic acid isolation

Recommended kits

Improved chemistry










Applied Biosystems™ MagMAX™ Prime Viral/Pathogen NA Isolation Kit

 Sample type	Swabs in transport media, saliva, urine, serum, plasma, and stool
 Sample input volume	200–400 µL
 Microbes	Viruses, fungi, parasites, and gram-positive and gram-negative bacteria
 Elution volume	200 µL for stool and stool-derivative samples and 60 µL for all other sample types
 Total processing time	30 min for basic workflow, 50 min for advanced lysis workflow, and 60 min for advanced stool workflow
 Reactions (rxn)	600 rxn
 Cat. No.	A58145, A58146PF.* and large stand-alone bottles (see web page)

* Prefilled plates available only in certain regions. Please contact your sales rep to learn more.

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Applied Biosystems™ MagMAX™ Viral/Pathogen Nucleic Acid Isolation Kit

 Sample type	Swabs and saliva
 Sample input volume	200 µL–2 mL
 Detection limit	≥50 copies*
 Elution volume	50–100 µL
 Total processing time	40 min
 Reactions (rxn)	100 rxn
 Cat. No.	A42352, A48383R

* The number of copies depends on the sample type and targets.

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Find out more at thermofisher.com/mvpprime

Nucleic acid isolation (continued)

Recommended kits



Applied Biosystems™ MagMAX™ Viral/Pathogen Ultra Nucleic Acid Isolation Kit

	Sample type	Swabs, urine, VTM, and saliva
	Microbes	Lysed viruses, yeast, fungi, gram-negative and gram-positive bacteria
	Sample input volume	200 µL–2 mL
	Detection limit	≥50 viral copies;* ≥1,000 CFU (bacteria or fungi)
	Elution volume	60–100 µL
	Total processing time	65 min
	Reactions (rxn)	100 rxn
	Cat. No.	A42356

* The number of copies depends on the sample type and targets.

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Applied Biosystems™ MagMAX™ Viral/Pathogen Nucleic Acid Isolation Kit, for HIV-1 dried blood spots (DBS)

	Sample type	Plasma and DBS
	Sample input volume	200 µL
	Detection limit	Extract amplifiable viral RNA from DBS and plasma samples (DBS: >2,000 copies/mL; plasma: >1,000 copies/mL)
	Total processing time	60 min (~30 min for DBS lysis and ~30 min for viral RNA extraction)
	Reactions (rxn)	100 rxn
	Cat. No.	A53770

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Microbiome

Recommended kits



Applied Biosystems™ MagMAX™ Microbiome Ultra Nucleic Acid Isolation Kit

	Sample type	Stool, soil, viral transport medium, urine, and saliva
	Sample input volume	100 mg of stool, 250 mg of soil, 400 µL of biofluid
	Yield	40–60 µg of stool, 5–10 µg of soil
	Elution volume	50–200 µL or more
	Total processing time	50 min for stool, 70 min for soil and biofluid
	Reactions (rxn)	100 rxn
	Cat. No.	A42357 (with plate), A42358 (with tubes)

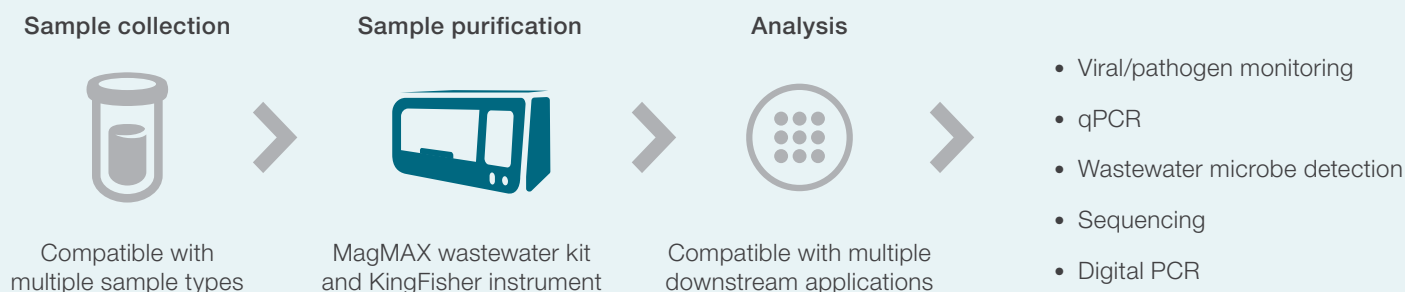
For Research Use Only. Not for use in diagnostic procedures.

Compare features of these kits side by side: [download flyer](#)

Find out more at thermofisher.com/magmaxviralpathogen, thermofisher.com/magmaxmicrobiome, and thermofisher.com/mvpprime

Wastewater

Sample workflow



Wastewater surveillance testing and research

- Choose your preferred concentration method and protocol
- Preconcentrate samples from large volumes using ultracentrifugation, precipitation, or filtration
- Use Dynabeads intact virus enrichment for optimized and advanced concentration
- Directly isolate from 1 mL of wastewater without concentration

Recommended kits



Applied Biosystems™ MagMAX™ Wastewater Ultra Nucleic Acid Isolation Kit

	Sample type	Wastewater, water, and sludge
	Sample input volume	200 µL–500 mL or 200 mg of sludge
	Yield	Varies
	Elution volume	50–100 µL
	Total processing time	45–90 min
	Reactions (rxn)	20–100 rxn
	Cat. No.	A52606

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Applied Biosystems™ MagMAX™ Wastewater Ultra Nucleic Acid Isolation Kit with Virus Enrichment

	Sample type	Wastewater, water
	Sample input volume	10 mL
	Yield	Varies
	Elution volume	50–100 µL
	Total processing time	75 min
	Reactions (rxn)	100 rxn
	Cat. No.	A52610

For Research Use Only. Not for use in diagnostic procedures.

Find out more at thermofisher.com/magmaxwastewater

Plasmid

Plasmid DNA

Extract high-quality, transfection-grade plasmid DNA from bacterial cultures without centrifugation or vacuum filtration. Purified plasmids are suitable for a wide range of downstream applications.

Sample workflow

Sample collection



Bacterial culture



Sample purification



MagMAX Pro HT
NoSpin kit and
KingFisher instrument



Analysis

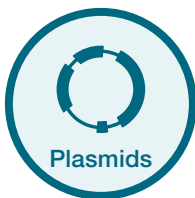


Compatible with multiple
downstream applications









- Transfection
- *In vitro* transcription (IVT)
mRNA synthesis
- Vaccine development
- Cloning
- Gene editing
- Cell and gene therapy
- Protein therapy

Recommended kits



Applied Biosystems™ MagMAX™ Pro HT NoSpin Plasmid Miniprep Kit

 Sample type	Bacterial cultures
 Yield	Up to 20 µg plasmid DNA per 1 mL of culture
 Elution volume	100 µL
 Total processing time	35 min
 Reactions (rxn)	96, 384, 1,152, or 2,304 rxn
 Cat. No.	A58309, A58310, A58311, A58312

For Research Use Only. Not for use in diagnostic procedures.

Experience a hands-free, maxi-scale plasmid purification process and fully automated workflow that helps eliminate labor-intensive centrifugation and pipetting steps. Simply pour in your culture and let the instrument handle the rest.

Learn more at thermofisher.com/plasmidpro



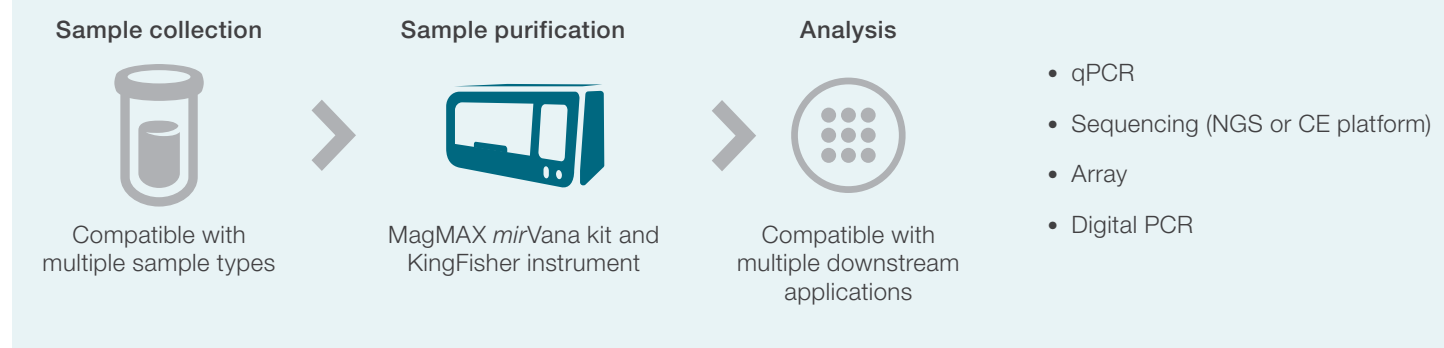
Find out more at thermofisher.com/plasmid

RNA

RNA for gene expression

Isolate total RNA, as well as small RNAs such as microRNA (miRNA), from a wide variety of sample types using a phenol-free extraction (no organic extraction).

Sample workflow



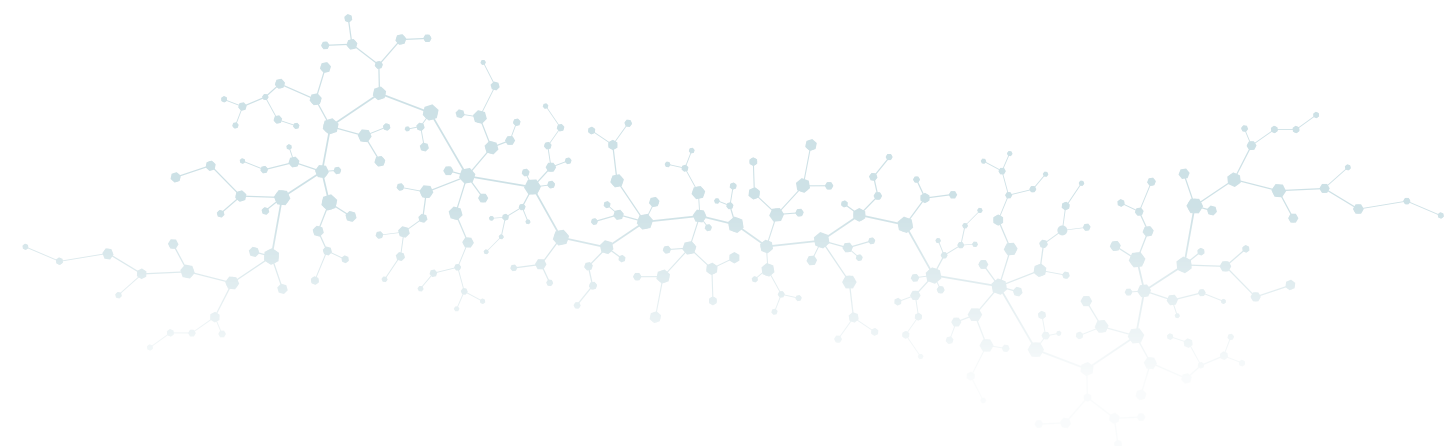
Recommended kits



Applied Biosystems™ MagMAX™ *mirVana*™ Total RNA Isolation Kit

Sample type	Multiple, including whole blood, bone marrow, saliva, buffy coat, swabs, cultured cells, tissue, and blood cards
Sample input volume	Cells: $\leq 10^6$; plasma: ≤ 100 μ L; serum: ≤ 100 μ L; tissue: ≤ 50 mg; urine: ≤ 250 μ L; whole blood: ≤ 50 μ L
Yield	50 μ L whole blood: 100–500 ng 5 mg mouse brain: ≥ 5 μ g 5 mg mouse liver: ≥ 30 μ g
Elution volume	50 μ L
Total processing time	1.5–2 hr total time (20 min hands-on time)
Reactions (rxn)	96 rxn
Cat. No.	A27828

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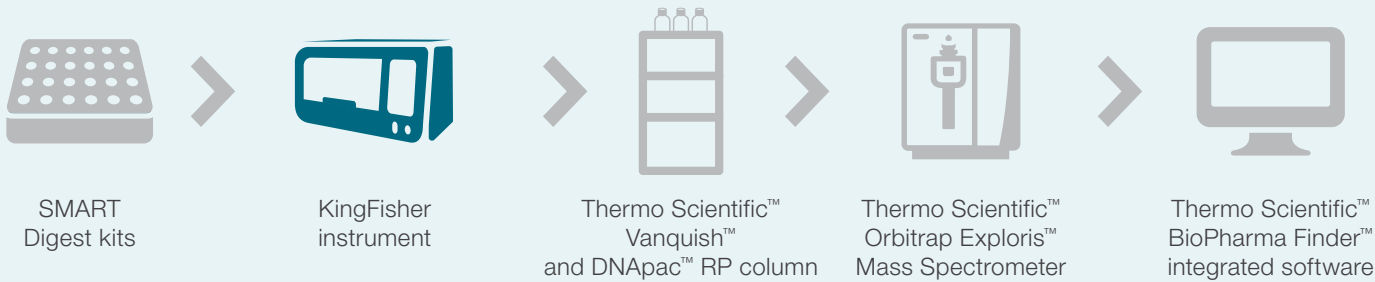


Find out more at thermofisher.com/magmaxmirvana

mRNA mapping

Explore a rapid, straightforward, reproducible, and highly sensitive mRNA partial digestion technique that can help enhance the reliability of your chromatography and liquid chromatography–mass spectrometry (LC-MS) findings.




mRNA mapping workflow



Recommended kits



Thermo Scientific™ SMART Digest™ kits for mRNA mapping

 Sample type	Cell broth/plasma/serum
 Sample input volume	Up to 50 µL (50 µL of the SMART Digest RNase buffer with 40 µg of mRNA)
 Total processing time	5–15 min digestion on KingFisher instrument; 60 min LC analysis

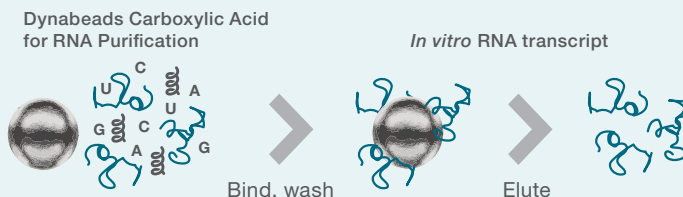
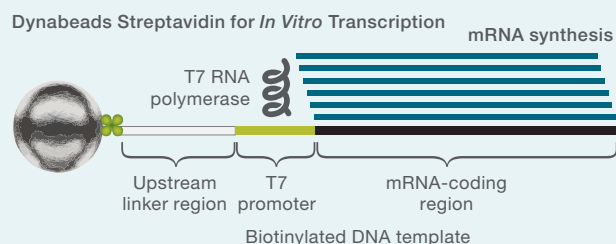
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Find out more at thermofisher.com/smartdigest

mRNA synthesis and purification

Accelerate your research and development with our innovative, simple, and cost-efficient workflows.

mRNA synthesis and purification workflow



Key features:

- **Flexibility**—choose your DNA template for *in vitro* transcription (IVT) with flexibility of design and amplification
- **Efficiency**—reduce costs and minimize plasmid prep hands-on time and risk of bacterial host DNA transfer by reusing the DNA template and beads (at least six times)
- **Scalability**—easily swap between manual and automated workflows to match your required scale (micrograms to grams of mRNA) and throughput
- **Automation-ready**—enable template immobilization, IVT, and mRNA purification of 96 samples in less than 4 hours and up to 5 mg mRNA per well

mRNA synthesis and purification on KingFisher automated systems.

Format	Template immobilization + <i>in vitro</i> transcription	Purification	Volume/well
96-well	3 hours	40 min	100–1,000 µL
24-well	3.5 hours	55 min	200–5,000 µL

Ordering information

Product	Unit size	Cat. No.
Dynabeads Streptavidin for <i>In Vitro</i> Transcription	2 mL	65005D
	10 mL	65006D
Dynabeads Carboxylic Acid for RNA Purification	2 mL	65020D
	10 mL	65021D
Dynabeads RNA Purification Kit	2 mL	65030D
	10 mL	65032D
Dynabeads <i>In Vitro</i> Transcription and RNA Purification Kit	2 mL	65034D
	10 mL	65036D
Dynabeads RNA Binding Buffer	20 mL	65040D
	50 mL	65042D

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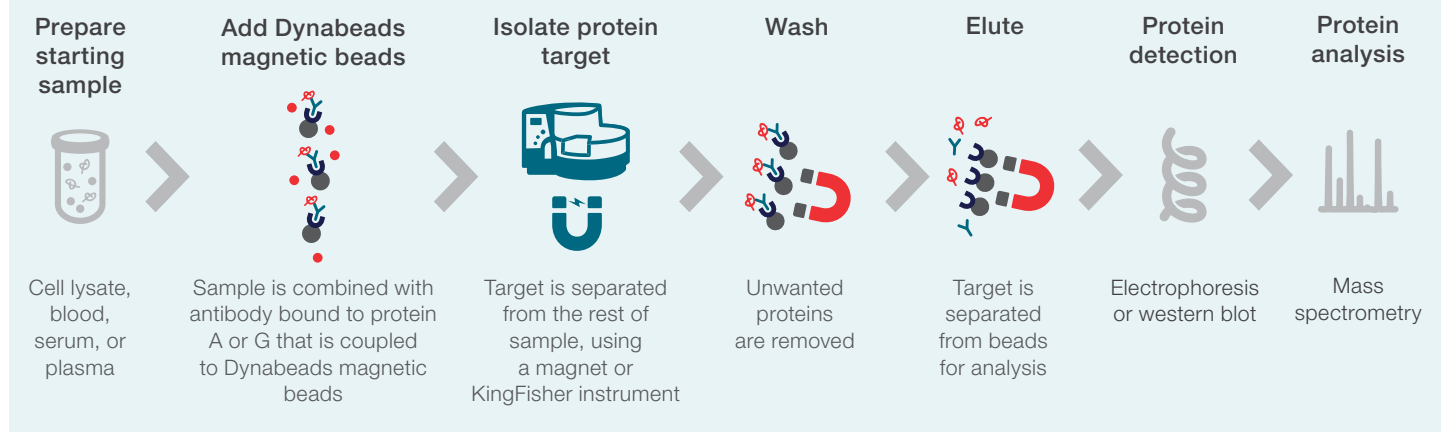
Find out more at thermofisher.com/dynabeadsmrna

Protein

Immunoprecipitation (IP)

KingFisher instruments with Dynabeads magnetic beads offer a great balance of high yield and reproducibility with low nonspecific binding, which is one reason they have become an excellent choice for immunoprecipitation using magnetic beads.

Sample workflow



Dynabeads magnetic beads for IP

- Automated IP in 40 min
- High yield with low antibody consumption and low nonspecific binding
- Rapid target binding; short incubation and separation times

Ordering information

Product	Quantity	Cat. No.
Dynabeads Protein A for Immunoprecipitation	1 mL	10001D
Dynabeads Protein G for Immunoprecipitation	1 mL	10003D
Dynabeads Protein A/Protein G and Magnet Starter Pack	40 reactions	10015D
Dynabeads Protein A IP Kit and Magnet Starter Pack	40 reactions	10018D
Dynabeads Protein G IP Kit and Magnet Starter Pack	40 reactions	10019D
Dynabeads His-Tag Isolation and Pulldown	2 mL	10103D
Dynabeads M-280 Sheep Anti-Mouse IgG	10 mL	11202D
Dynabeads M-280 Sheep Anti-Rabbit IgG	10 mL	11204D
Dynabeads M-280 Streptavidin	10 mL	11206D
Dynabeads Antibody Coupling Kit	1 kit	14311D
Dynabeads Co-Immunoprecipitation Kit	40 reactions	14321D
DynaGreen CaptureSelect Anti-IgG-Fc (Multi-Species) Magnetic Beads	20 reactions	80107G
DynaGreen Protein A/G Magnetic Beads	20 reactions	80104G
DynaGreen Protein A Magnetic Beads	20 reactions	80101G

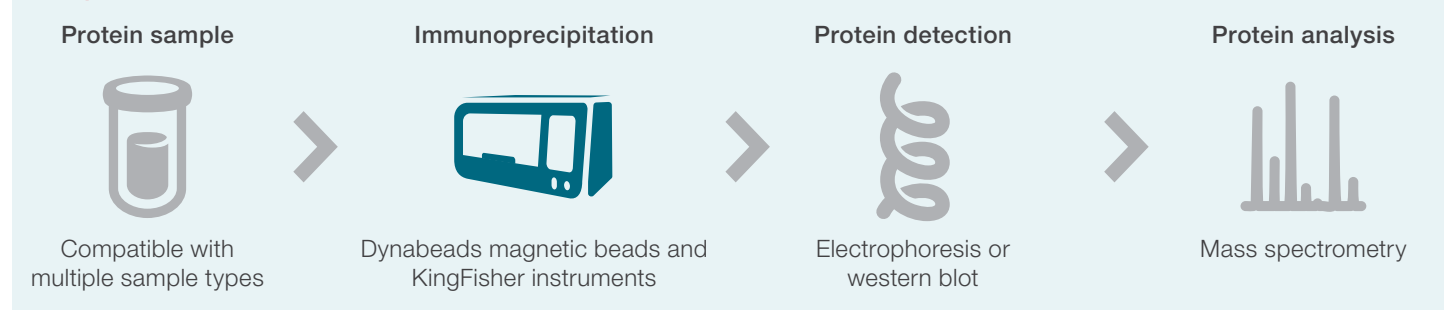
For Research Use Only. Not for use in diagnostic procedures.

Find out more at thermofisher.com/immunoprecipitation

Co-immunoprecipitation

Co-immunoprecipitation (co-IP) is a widely used method for isolating a target protein along with its binding partners for analysis. Dynabeads kits facilitate quick and easy co-IP of intact, functional protein complexes, helping to ensure that only the proteins of interest are isolated.



Sample workflow



Recommended kits



Invitrogen™ Dynabeads™ Co-Immunoprecipitation Kit

 Sample types	Cell cultures, disks, plants, tissue digests, cell extracts, cell lysates, intact proteins, normalized buccal cells
 Final product type	Protein complexes (intact), protein/nucleic acid complexes

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Commercial supply and OEM partnerships

We partner with leading biotech, healthcare, and therapeutic companies to develop optimized Dynabeads magnetic beads that meet specific application and regulatory requirements. We support partners from early assay development and validation through scale-up and commercialization.

Find out more at thermofisher.com/dynabeadstechnologyoem

Sustainable immunoprecipitation

Invitrogen™ DynaGreen™ magnetic beads provide high-quality, reproducible results and are also environmentally friendly and microplastic-free. The magnetic separation technology used by these beads is rapid and gentle, thereby causing minimal physical stress to your target proteins.

DynaGreen beads, consisting of a non-microplastic bead core and made with biosolvents, give reproducible results with low nonspecific binding and are suitable for downstream mass spectrometry and western workflows.

Sample workflow

Prepare starting sample



Add DynaGreen magnetic beads



Sample is combined with antibody bound to protein A, A/G, or Anti-IgG-Fc that is coupled to DynaGreen magnetic beads



Isolate protein target



Target is separated from the rest of sample, using a magnet or KingFisher instrument



Wash



Unwanted proteins are removed



Elute



Target is separated from beads for analysis

Recommended beads



Protein A

Invitrogen™ DynaGreen™ Protein A Magnetic Beads

When to use	When using rabbit antibody, particularly to pull down large amounts of protein
Yield	High
Nonspecific binding	Low

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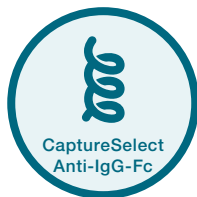


Protein A/G

Invitrogen™ DynaGreen™ Protein A/G Magnetic Beads

When to use	When using mouse and rabbit antibodies, particularly when you want high yields of target protein
Yield	High
Nonspecific binding	Low

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CaptureSelect
Anti-IgG-Fc

Invitrogen™ DynaGreen™ CaptureSelect Anti-IgG-Fc (Multi-Species) Magnetic Beads

When to use	May be used with secondary antibodies from multiple species
Yield	Medium
Nonspecific binding	Ultra-low

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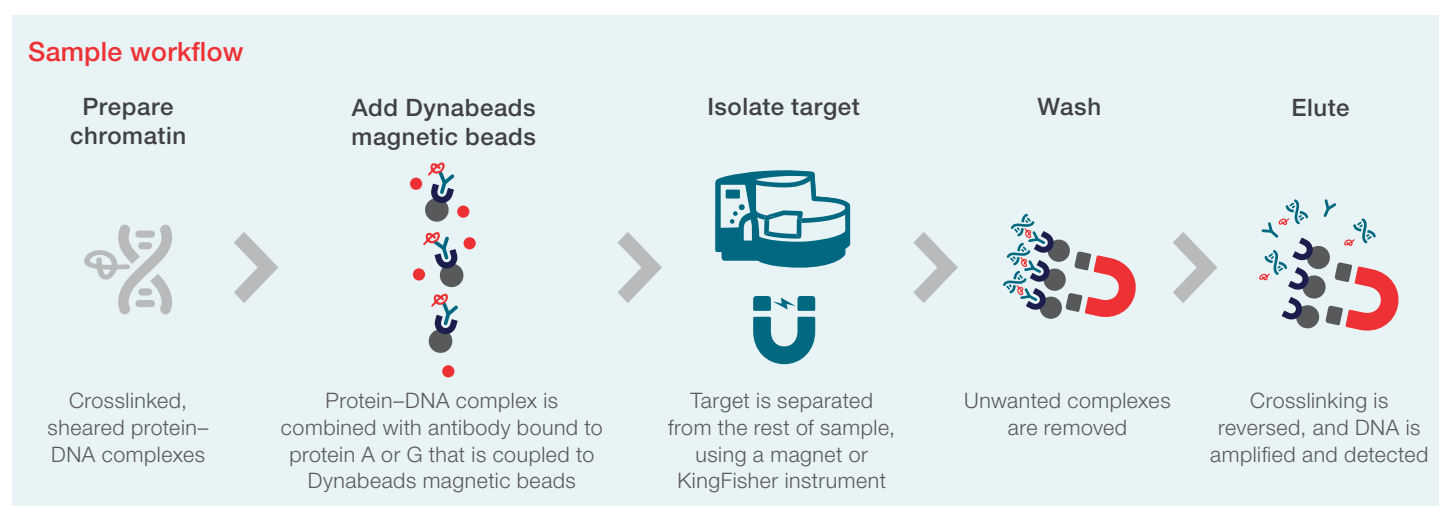
Find out more at thermofisher.com/dynagreen

Chromatin and RNA immunoprecipitation

The chromatin immunoprecipitation (ChIP) assay is a powerful method for analyzing epigenetic modifications and genomic DNA sequences bound to specific regulatory proteins. ChIP experiments require a variety of steps, including crosslinking with formaldehyde, cell lysis (protein–DNA extraction), chromatin shearing, antibody-based immunoprecipitation, DNA sample cleanup, and PCR.

RNA immunoprecipitation (RIP) uses an approach similar to ChIP, except that RNA-binding proteins are immunoprecipitated instead of DNA-binding proteins. Immunoprecipitated RNAs can then be identified by RT-PCR and cDNA sequencing.

Because Dynabeads magnetic bead–based separation is gentle and sensitive, it is exceptional for capturing DNA and protein complexes. In fact, a single DNA-binding protein can bind to multiple DNA sequences. Dynabeads technology allows capture of both rare and abundantly bound DNA.



Ordering information

Product	Quantity	Cat. No.
Dynabeads Protein A Immunoprecipitation Kit	40 reactions	10006D
Dynabeads Protein A for Immunoprecipitation*	5 mL	10002D
Dynabeads Protein G Immunoprecipitation Kit	40 reactions	10007D
Dynabeads Protein G for Immunoprecipitation*	5 mL	10004D
Dynabeads Antibody Coupling Kit	1 kit	14311D
Dynabeads Co-Immunoprecipitation Kit	40 reactions	14321D
Dynabeads M-280 Sheep Anti-Mouse IgG*	10 mL	11202D
Dynabeads M-280 Sheep Anti-Rabbit IgG*	10 mL	11204D
Dynabeads M-280 Streptavidin*	10 mL	11206D

* Additional volumes are available at [thermofisher.com](https://www.thermofisher.com).

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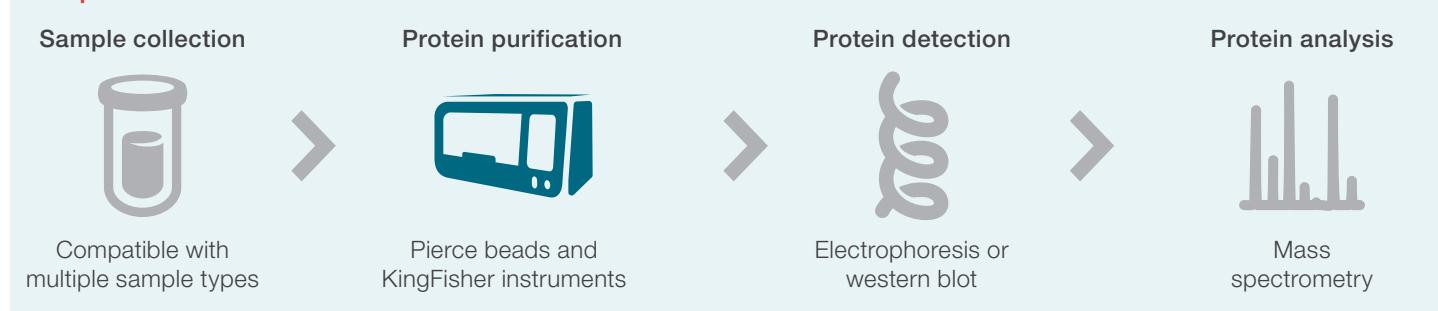
Find out more at [thermofisher.com/dynabeadschip](https://www.thermofisher.com/dynabeadschip)

Affinity purification

Thermo Scientific™ Pierce™ magnetic beads support a variety of ligands for protein purification, IP, co-IP, pulldown, and other high-throughput affinity screening applications utilizing immobilized protein A, G, A/G, L, Ni-NTA, glutathione, and anti-FLAG.



Sample workflow



Recommended kits



Thermo Scientific™ Pierce™ magnetic agarose beads

- **High binding**—up to 100-fold greater binding capacity than traditional magnetic beads
- **More choices**—multiple ligands available for different purification strategies, including immobilized protein A/G, Ni-NTA, glutathione, and anti-FLAG
- **Automation-compatible**—can be used with magnetic particle processors for higher-throughput applications
- **Flexible**—can scale up or down as needed using adaptable protocols

Ordering information

Product	Quantity*	Cat. No.
Pierce Protein A/G Magnetic Beads	1 mL	88802
Pierce Protein A Magnetic Beads	1 mL	88845
Pierce High Capacity Protein A MagBeads, alkali stable	1 mL	A53035
Pierce Classic Magnetic IP/Co-IP Kit	40 reactions	88804
Pierce Anti-HA Magnetic Beads	1 mL	88836
Pierce Anti-c-Myc Magnetic Beads	1 mL	88842
Pierce Magnetic RNA-Protein Pull-Down Kit	20 reactions	20164
Pierce Streptavidin Magnetic Beads	1 mL	88816
Pierce Anti-DYKDDDDK Magnetic Agarose	1 mL	A36797
Pierce High Capacity Ni-IMAC MagBeads, EDTA compatible	1 mL	A50588
EasyPep Magnetic MS Sample Prep Kit	96 reactions	A57867

* Additional sizes and kits are available.

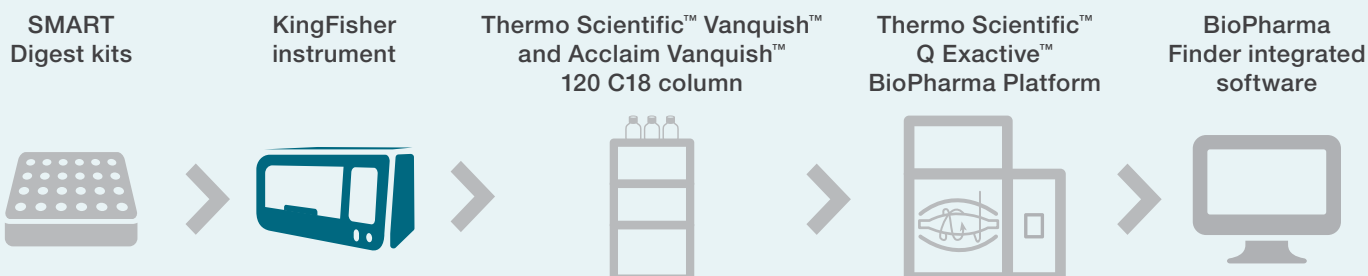
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Learn more at thermofisher.com/magbeadsproteomics

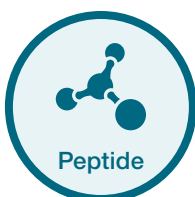
Peptide mapping and quantitation

Discover fast, easy, reproducible, and sensitive protein digestion with immunoaffinity capture, which can help give you higher confidence in your chromatography and LC-MS results.

Peptide mapping workflow



Recommended kits

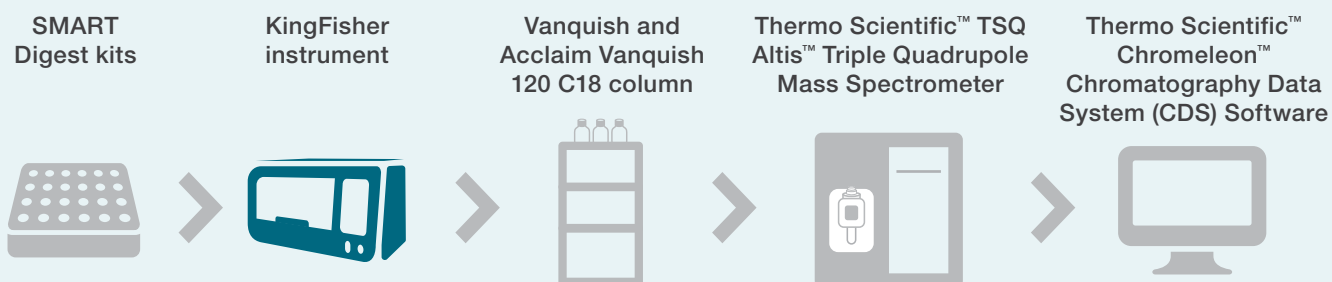


Thermo Scientific™ SMART Digest™ kits for peptide mapping

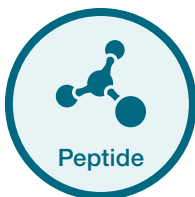
	Sample type	Cell broth, plasma, and serum
	Sample input volume	Up to 50 µL (200 pg–3.5 mg of total protein)
	Total processing time	Typical mAb ~45 min (dependent on size and complexity of protein)

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Peptide quantitation workflow



Recommended kits



Thermo Scientific™ SMART Digest™ immunoaffinity kits for peptide quantitation

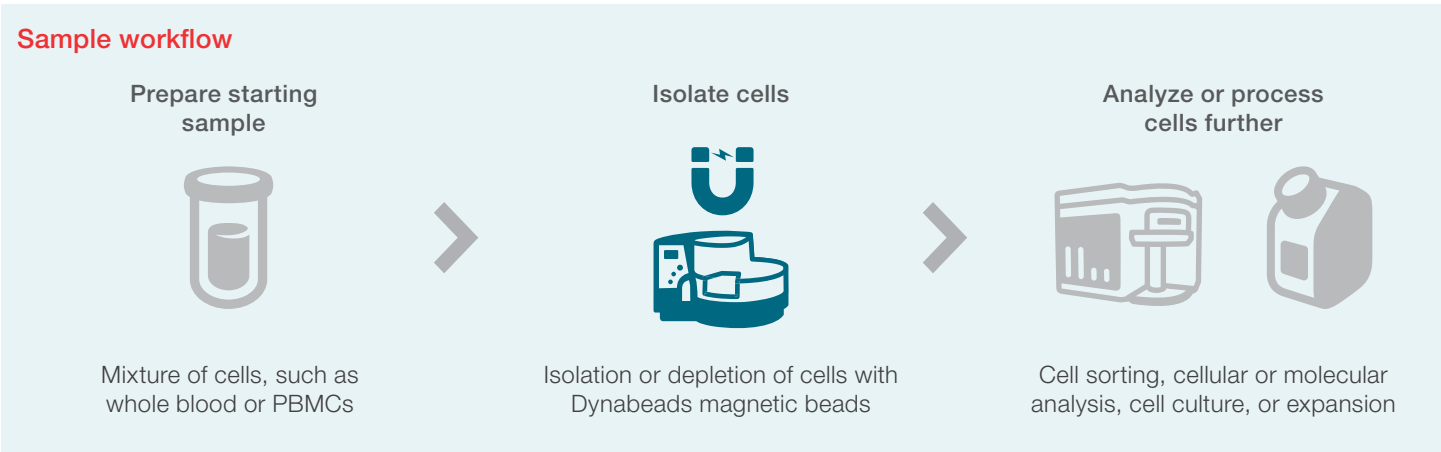
	Sample type	Cell broth, plasma, and serum
	Sample input volume	Up to 50 µL (200 pg–3.5 mg of total protein)
	Total processing time	Typical mAb ~3–4 hr (dependent on size and complexity of protein)

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Find out more at thermofisher.com/smartdigest

Cell isolation

Isolate cells from mouse, human, or other species using a variety of positive or negative isolation or depletion kits. With Dynabeads products, cell isolation is fast and easily scalable, and they allow you to obtain cells with high purity, yield, and viability. Automated cell isolation can be followed by automated protein and nucleic acid isolation for a fully automated workflow, helping save time while increasing throughput and consistency of results.



Ordering information

Product	Cat. No.
Positive isolation	
Isolation of human cells	
Dynabeads CD4 Positive Isolation Kit	11331D
Dynabeads CD8 Positive Isolation Kit	11333D
Dynabeads FlowComp Human CD3 Kit	11365D
Dynabeads FlowComp Human CD4 Kit	11361D
Dynabeads FlowComp Human CD8 Kit	11362D
Dynabeads FlowComp Human CD14 Kit	11367D
Dynabeads Regulatory CD4+/CD25+ T Cell Kit	11363D
DETAChAaBEAD CD19*	12506D
CELLlection Epithelial Enrich Dynabeads	16203
Isolation of mouse cells	
Dynabeads FlowComp Mouse CD4 Kit	11461D
Dynabeads FlowComp Mouse CD8 Kit	11462D
Dynabeads FlowComp Mouse Pan T Kit	11465D
Depletion	
Depletion of human cells	
Dynabeads CD19 Pan B*	11143D
Dynabeads CD31 Endothelial Cell	11155D
Dynabeads CD45	11153D
Dynabeads CD14	11149D
Dynabeads CD2	11159D
Dynabeads CD3	11151D
Dynabeads CD4	11145D
Dynabeads CD8	11147D
Dynabeads CD25	11157D
Dynabeads Epithelial Enrich	16102
Depletion of mouse cells	
Dynabeads Mouse Pan B	11441D
Dynabeads Mouse Pan T	11443D
Dynabeads Mouse CD4	11445D
Dynabeads Mouse CD8 (Lyt 2)	11447D

* For positive isolation and release of B cells, the DETAChAaBEAD CD19 reagent needs to be used in combination with Dynabeads CD19 magnetic beads.

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Product	Cat. No.
Beads conjugated to secondary antibodies— add your own antibody	
CELLlection Biotin Binder Kit	11533D
Dynabeads Biotin Binder	11047
Dynabeads FlowComp Flexi Kit	11061D
Dynabeads Pan Mouse IgG	11041
Dynabeads Sheep Anti-Mouse IgG	11031
Dynabeads Sheep Anti-Rat IgG	11035
Negative isolation	
Isolation of human cells	
Dynabeads Regulatory CD4+/CD25+ T Cell Kit	11363D
Dynabeads Human DC Enrichment Kit	11308D
Dynabeads Untouched Human T Cells Kit	11344D
Dynabeads Untouched Human CD4 T Cells Kit	11346D
Dynabeads Untouched Human CD8 T Cells Kit	11348D
Dynabeads Untouched Human NK Cells Kit	11349D
Dynabeads Untouched Human Monocytes Kit	11350D
Dynabeads Untouched Human B Cells Kit	11351D
Isolation of mouse cells	
Dynabeads Mouse CD43	11422D
Dynabeads Mouse DC Enrichment	11429D
Dynabeads Untouched Mouse T Cells Kit	11413D
Dynabeads Untouched Mouse CD4 Cells Kit	11415D
Dynabeads Untouched Mouse CD8 Cells Kit	11417D

Additional instrument applications

mRNA

Target and capture the mRNA transcriptome from an extremely wide variety of crude starting samples using Invitrogen™ Dynabeads™ mRNA DIRECT™ kits. These kits are designed for simple and rapid isolation of pure, intact poly(A) RNA directly from the crude lysate of animal and plant cells and tissues. The isolated mRNA is suitable for use in all downstream applications.

- **Fast**—approximately 15 minute procedure yields pure, intact mRNA
- **Sensitive**—enables cDNA synthesis and cDNA library construction from ultrasmall starting samples

Plant DNA or RNA








Use Applied Biosystems™ MagMAX™ Plant DNA and RNA kits for automation-ready purification of DNA and RNA from a wide variety of plant species.

- Purification of total RNA from a wide variety of plant species and tissue types, including plant fungus
- Purified RNA is free of proteins, nucleases, and other contaminants or inhibitors
- Optimized for the isolation of DNA from 10–100 mg plant samples

Recommended kits









Dynabeads mRNA DIRECT kits

 Sample type	Blood, cells, FFPE and fixed samples, liquid samples (e.g., serum), plant samples, RNA, tissue, viral samples, yeast
 Sample input volume	Up to 20 x 10 ⁶ cells 2–200 mg animal tissue 4–400 mg plant tissue
 Yield	2 µg of mRNA per 1 mg of Dynabeads oligo(dT)
 Elution volume	10–100 µL
 Total processing time	15 min
 Reactions (rxn)	20 or 40 rxn
 Cat. No.	61011, 61012

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MagMAX Plant DNA kit and RNA kit

	DNA	RNA
 Sample type	Plant tissue	
 Sample input volume	Up to 100 mg	
 Yield	Varies based on starting material	
 Total processing time	<40 min for DNA	<75 min for RNA
 Reactions (rxn)	96 or 384 rxn	
 Cat. No.	A32549, A32580	A33784, A33899

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Customize your KingFisher system

Customize your protocols

Thermo Scientific™ BindIt™ Software is included on KingFisher Duo Prime and KingFisher Flex instruments. Thermo Scientific™ BindIt™ Software is included on KingFisher Apex instruments. These software programs make it easy to create, modify, and store your protocols.

- Included with purchase of your KingFisher instrument
- Modify prewritten protocols or create your own to handle more applications

Search our extensive library of automated protocols at thermofisher.com/kingfisherprotocols

Interchangeable magnetic heads

The magnetic head can be easily switched without tools, depending on your plate setup, allowing you to run large or small volumes.

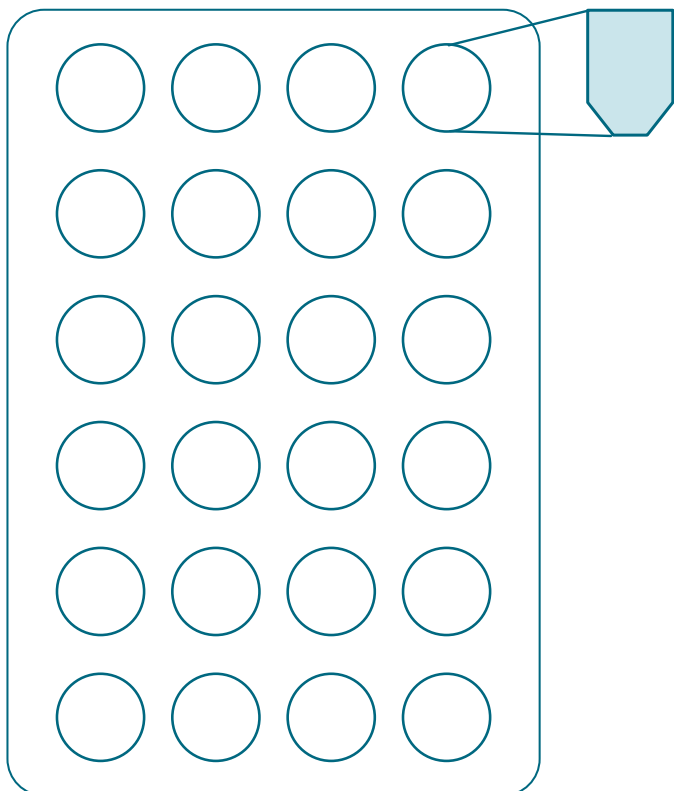


KingFisher plate formats

KingFisher instruments support a 24- or 96-well plate format for great flexibility of input volume.

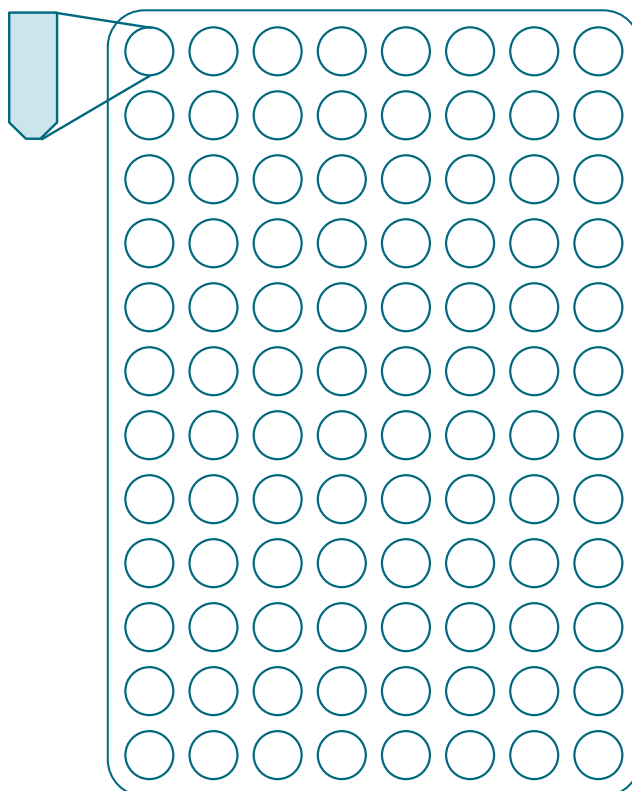
24 deep-well plates

200–5,000 μL



96 deep-well plates

50–1,000 μL



KingFisher plastics for KingFisher instruments

Designed for KingFisher instruments

Both the yield and quality of isolated protein or nucleic acid can be significantly improved with special plates and tip combs designed for KingFisher systems.

- Made of polypropylene
- Low binding affinity for biomolecules, ideal for magnetic particle processing
- Sterile plastics come with a purity certificate and are guaranteed to be free of RNases, DNases, and contamination from DNA or endotoxins

KingFisher instrument:	Duo Prime	Flex	Apex	Presto	Cat. No.
Plastics for 96 deep-well format					
KingFisher Apex 96 combi tip comb			✓		97002570
Plastics for 96 standard and PCR formats					
KingFisher Apex 96 PCR tip comb			✓		97002560
PCR plate, skirted (or similar PCR plate)*		✓			AB1300
Plastics for 24 deep-well format					
KingFisher Apex 24 combi tip comb			✓		97002580

* Recommended plastics.

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KingFisher instrument:	Duo Prime	Flex	Apex	Presto	Cat. No.
Plastics for 96 deep-well format					
Nunc 96 storage tubes*			✓		374086

* Recommended plastics.

For In Vitro Diagnostic Use.

KingFisher instrument:	Duo Prime	Flex	Apex	Presto	Cat. No.
Plastics for 96 deep-well format					
KingFisher 96 deep-well plate, barcoded			✓		95040450B
KingFisher 96 deep-well plate, sterile, barcoded			✓		95040460B
KingFisher 96 tip comb for deep-well magnet, barcoded			✓		97002534B
KingFisher 96 deep-well tip comb and plate, sterile, barcoded			✓		97002820B
KingFisher 96 deep-well plate	✓	✓		✓	95040450
KingFisher 96 deep-well plate, sterile	✓	✓		✓	95040460
KingFisher 96 deep-well tip comb and plate, sterile		✓		✓	97002820
Plastics for 96 standard and PCR formats					
KingFisher 96 microplate (200 µL), barcoded			✓		97002540B
KingFisher 96 tip comb for KingFisher magnets, barcoded			✓		97002524B
PCR plate, 96 deep-well, clear, clear wells*			✓		AB2396
PCR plate, 96 deep-well, semi-skirted, low profile, clear wells*			✓		AB2496
KingFisher 96 microplate (200 µL)		✓		✓	97002540
KingFisher 96 tip comb for KingFisher magnets		✓			97002524
KingFisher 96 tip comb for PCR magnets		✓			97002514

Find all compatible KingFisher plastics at thermofisher.com/kingfisherplastics

KingFisher instrument:	Duo Prime	Flex	Apex	Presto	Cat. No.
Plastics for 24 deep-well format					
KingFisher 24 deep-well plate, barcoded			✓		95040470B
KingFisher 24 deep-well plate, sterile, barcoded			✓		95040480B
KingFisher 24 deep-well tip comb and plate, barcoded			✓		97002610B
KingFisher 24 deep-well tip comb and plate, sterile, barcoded			✓		97002620B
Nunc 24 storage tubes*			✓		374323
KingFisher 24 deep-well plate	✓	✓		✓	95040470
KingFisher 24 deep-well plate, sterile	✓	✓		✓	95040480
KingFisher 24 deep-well tip comb and plate		✓		✓	97002610
KingFisher 24 deep-well tip comb and plate, sterile		✓		✓	97002620
KingFisher Duo Prime 6-tip combs and 24 deep-well plate (12 pieces of 24 deep-well plates, each including 4 tip combs)	✓				97003510
KingFisher Duo Prime 12-tip comb, for 96 deep-well plate	✓				97003500
KingFisher Duo Prime 12-tip elution strip	✓				97003520
KingFisher Duo Prime elution strip cap for 12 pin magnet	✓				97003540
KingFisher combi pack for microtiter 96 deep-well plate, includes 8 each of: <ul style="list-style-type: none"> • 96 deep-well plate • 12-tip comb • Elution strip • Cap for elution strip 	✓				97003530

* Recommended plastics.

Find all compatible KingFisher plastics at [thermofisher.com/kingfisherplastics](https://www.thermofisher.com/kingfisherplastics)

KingFisher instrument services and support



Instrument and application specialists

Whether servicing your KingFisher purification system or addressing your workflow application questions, our more than 1,000 trained professionals make up the industry's largest network, ready to assist you when you need it.



Quick-start training

The KingFisher system includes SmartStart Orientation to help get you up and running quickly in your lab. The orientation includes basic familiarization and setup with online instrument management and includes on-site training with standard kits.



Warranty and service plans

Every KingFisher system comes with a one-year warranty. Extended-coverage service plans are also available at the time of instrument purchase. Whether your laboratory requires our highest service levels and adherence to stringent regulatory guidelines, or you need to maximize performance with a limited budget—or anything in between—we'll work with you to develop a solution that best suits your needs.

Find out more at [thermofisher.com/instrumentservices](https://www.thermofisher.com/instrumentservices) and [thermofisher.com/contactus](https://www.thermofisher.com/contactus)

Ordering information

Product	Cat. No.
KingFisher instruments	
KingFisher Apex Purification System with 96 PCR Head	5400910
KingFisher Apex Purification System with 96 Combi Head	5400920
KingFisher Apex Purification System with 96 Deep-Well Head	5400930
KingFisher Apex Purification System with 24 Combi Head	5400940
KingFisher Flex Purification System with 96 PCR Head	5400610
KingFisher Flex Purification System with 96 KingFisher Head	5400620
KingFisher Flex Purification System with 24 Deep-Well Head	5400640
KingFisher Flex Purification System with 96 Deep-Well Head	5400630
KingFisher Presto Purification System with 24 Deep-Well Head	5400840
KingFisher Presto Purification System with 96 Deep-Well Head	5400830

For Laboratory Use.

Product	Cat. No.
KingFisher instruments	
KingFisher Duo Prime Purification System	5400110
KingFisher PlasmidPro Maxi Processor, 1 instrument	PPMX1000
KingFisher PlasmidPro Maxi Processor Endotoxin-Free Cartridge	A54072
KingFisher PlasmidPro Maxi Processor and AB Assurance service plan package	A66427
Nucleic acid purification products	
KingFisher Duo-Ready DNA Ultra 2.0 Prefilled Plates	A36584
KingFisher Flex-Ready DNA Ultra 2.0 Prefilled Plates	A36586
MagMAX <i>mirVana</i> Total RNA Isolation Kit	A27828
MagMAX DNA Multi-Sample Ultra 2.0 Kit*	A36570
MagMAX Saliva gDNA Isolation Kit*	A39059, A39060
MagMAX Cell-Free DNA Isolation Kit*	A29319
MagMAX Cell-Free Total Nucleic Acid Isolation Kit*	A36716
MagMAX FFPE DNA/RNA Ultra Kit*	A31881
MagMAX Microbiome Ultra Nucleic Acid Isolation Kit*	A42357, A42358
MagMAX Prime Viral/Pathogen NA Isolation Kit*	A58145
MagMAX Prime Viral/Pathogen NA Isolation Kit, prefilled plate	A58146PF
MagMAX Viral/Pathogen Nucleic Acid Isolation Kit*	A42352, A48383R
MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit*	A42356

Product	Cat. No.
MagMAX Pure Bind Beads	A58521, A58522, A58523
MagMAX Sequential DNA/RNA Kit	A65309*
MagMAX Viral/Pathogen Nucleic Acid Isolation Kit, for HIV-1 dried blood spots (DBS)	A53770
MagMAX Pro HT NoSpin Plasmid Miniprep Kit	A58309, A58310, A58311, A58312
MagMAX Plant DNA Isolation Kit*	A32549
MagMAX Plant RNA Isolation Kit	A33784
MagMAX Wastewater Ultra Nucleic Acid Isolation Kit	A52606
MagMAX Wastewater Ultra Nucleic Acid Isolation Kit with Virus Enrichment	A52610
Dynabeads mRNA DIRECT Purification Kit	61011
Immunoprecipitation and protein products	
Dynabeads Protein A	10002D
Dynabeads Protein G	10004D
Dynabeads M-280 Sheep Anti-Mouse IgG	11202D
Dynabeads M-280 Sheep Anti-Rabbit IgG	11204D
Dynabeads M-280 Streptavidin	11206D
Dynabeads Streptavidin for Target Enrichment	65605D, 65606D, 65607D
Dynabeads His-Tag Isolation and Pulldown	10103D
Pierce Streptavidin Magnetic Beads	88817
Pierce Protein A/G Magnetic Beads	88803
Pierce Protein A/G Magnetic Agarose Beads	78609
Pierce Ni-NTA Magnetic Agarose Beads	78605
Pierce Anti-DYKDDDDK Magnetic Agarose Beads	A36797
Pierce Glutathione Magnetic Agarose Beads	78601
SMART Digest kits for peptide mapping and quantitation	60109-101-MB-60109-109-MB
SMART Digest IA kits for peptide quantitation	60110-103-60112-104
DynaGreen CaptureSelect Anti-IgG-Fc (Multi-Species) Magnetic Beads	80107G
DynaGreen Protein A/G Magnetic Beads	80104G
DynaGreen Protein A Magnetic Beads	80101G

* May be purchased as individual bulk reagents.

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