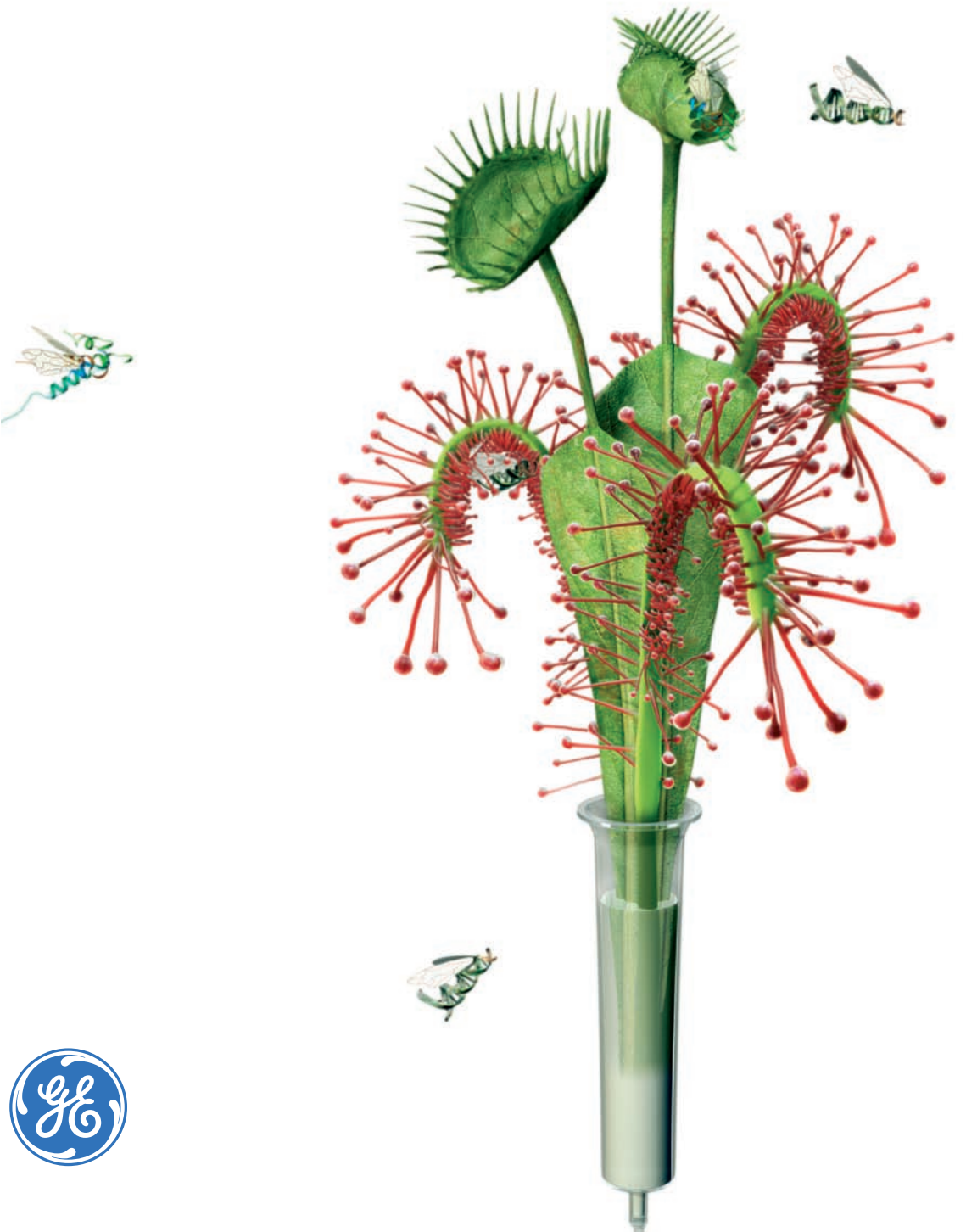


GE Healthcare

Protein and nucleic acid sample preparation

Selection Guide



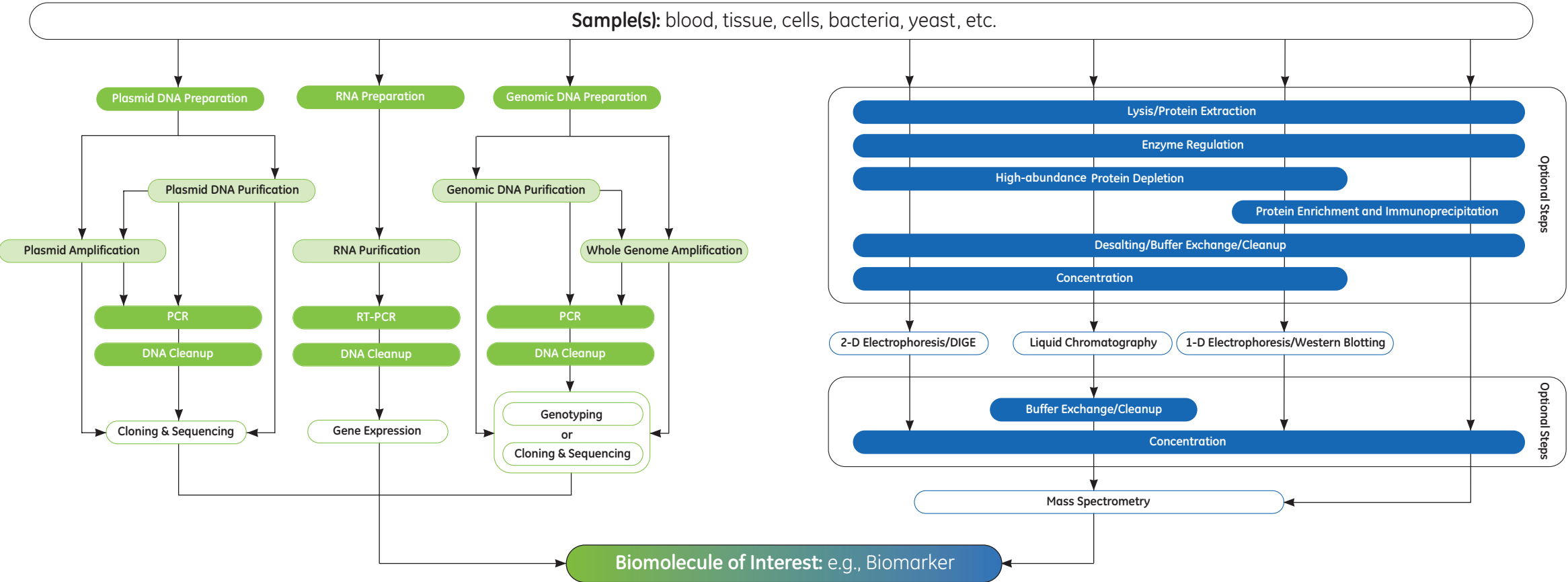
Nucleic Acid and Protein Workflows

Nucleic Acid Workflow

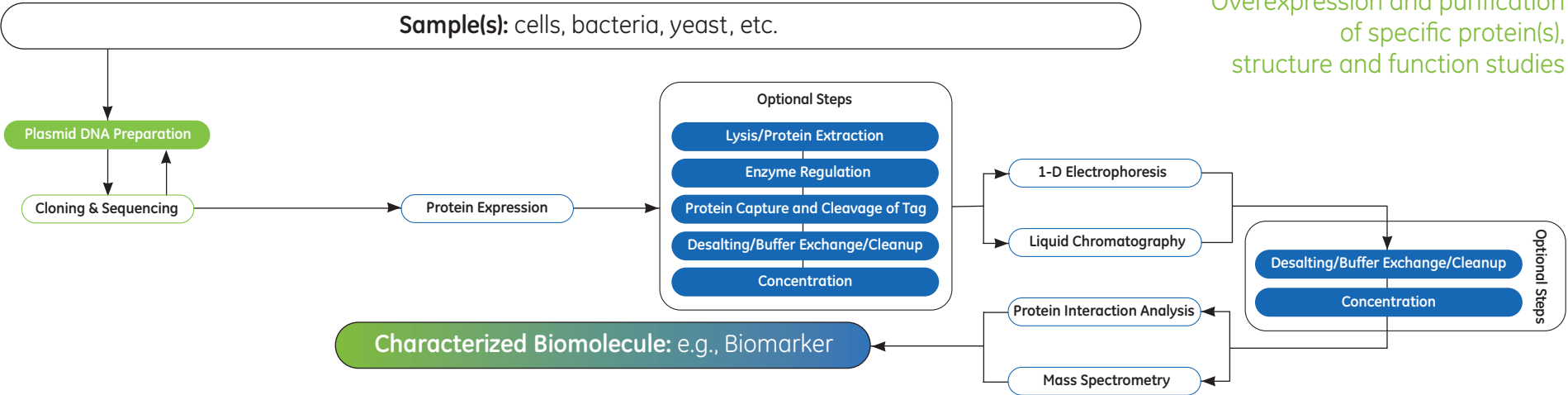
Genome and Gene Analysis

Protein Workflow

Differential Expression Analysis
Protein Mapping



Construction of expression-ready DNA clones



Overexpression and purification of specific protein(s), structure and function studies

Selection Guide for Protein Sample

Protein Sample Preparation

		Choose analysis method							
		2-D Electrophoresis	1-D Electrophoresis	Liquid Chromatography	From 2-D Elpho to MS	From 1-D Elpho to MS	From LC to MS	Protein Expression	Mass Spectrometry
Untagged Protein Enrichment									
NHS HP SpinTrap™	28-9031-28	•	•	•	•	•	•	•	Bulk NHS HP Sepharose™ and empty spin columns for coupling of an affinity molecule with a primary amine
NHS HP SpinTrap Buffer Kit	28-9135-69	•	•	•	•	•	•	•	Buffers for immuno-affinity enrichment using the NHS HP SpinTrap
Streptavidin HP SpinTrap	28-9031-30	•	•	•	•	•	•	•	Coupling of a biotinylated affinity molecule, spin column format
Streptavidin HP SpinTrap Buffer Kit	28-9135-68	•	•	•	•	•	•	•	Buffers for immuno-affinity enrichment using the Streptavidin HP SpinTrap
Streptavidin HP MultiTrap™	28-9031-31	•	•	•	•	•	•	•	Coupling of a biotinylated affinity molecule in 96-well filter plates by vacuum or centrifuge, larger sample series or automation
Protein A HP SpinTrap	28-9031-32	•	•	•	•	•	•	•	Coupling of an IgG affinity molecule, spin column format
Protein A HP MultiTrap	28-9031-33	•	•	•	•	•	•	•	Coupling of an IgG affinity molecule in 96-well filter plates by vacuum or centrifuge, large sample series or automation
Protein G HP SpinTrap	28-9031-34	•	•	•	•	•	•	•	Coupling of an IgG affinity molecule, spin column format
Protein A/G HP SpinTrap Buffer Kit	28-9135-67	•	•	•	•	•	•	•	Buffers for immunoaffinity enrichment using the Protein A HP SpinTrap, Protein G HP SpinTrap and Ab SpinTrap
Protein G HP MultiTrap	28-9031-35	•	•	•	•	•	•	•	Coupling of an IgG affinity molecule in 96-well filter plates by vacuum or centrifuge, larger sample series or automation
Ab SpinTrap	28-4083-47	•	•	•	•	•	•	•	Coupling of an IgG affinity molecule, spin column format, larger pack size
Immunoprecipitation Starter Pack	17-6002-35	•	•	•	•	•	•	•	Coupling of an IgG affinity molecule, batch application
Phos SpinTrap Fe	28-9298-81	•	•	•	•	•	•	•	Enrichment of phosphorylated peptides, spin column format, IMAC precharged with Fe
Small-scale Antibody Purification									
Protein A HP SpinTrap	28-9031-32	•	•	•	•	•	•	•	Purification of IgG, spin column format
Protein A HP MultiTrap	28-9031-33	•	•	•	•	•	•	•	Purification of IgG in 96-well filter plates by vacuum or centrifuge, larger sample series or automation
Protein G HP SpinTrap	28-9031-34	•	•	•	•	•	•	•	Purification of IgG, spin column format
Protein G HP MultiTrap	28-9031-35	•	•	•	•	•	•	•	Purification of IgG in 96-well filter plates by vacuum or centrifuge, larger sample series or automation
Ab SpinTrap	28-4083-47	•	•	•	•	•	•	•	Purification of IgG, spin column format, larger pack size
Ab Buffer Kit	28-9030-59	•	•	•	•	•	•	•	Buffers for antibody purification using the Protein A HP SpinTrap, Protein G HP SpinTrap and Ab SpinTrap
Desalting/Buffer Exchange/Cleanup									
Disposable PD-10 Desalting	17-0851-01	•	•	•	•	•	•	•	Clean-up of proteins/oligosaccharides, sample volumes up to 2.5 ml by gravity flow and columns spin flow
LabMate™ PD-10 Buffer	18-3216-03	•	•	•	•	•	•	•	Buffer reservoir for easy equilibration
PD MidiTrap™ G-25	28-9180-08	•	•	•	•	•	•	•	Clean-up of proteins/oligosaccharides, sample volumes up to 1.0 ml, by gravity flow and spin flow
PD MiniTrap™ G-25	28-9180-07	•	•	•	•	•	•	•	Clean-up of proteins/oligosaccharides, sample volumes up to 0.5 ml, by gravity flow and spin flow
PD SpinTrap G-25	28-9180-04	•	•	•	•	•	•	•	Clean-up of proteins/oligosaccharides, sample volumes up to 130 µl, by microcentrifugation
PD MultiTrap G-25	28-9180-06	•	•	•	•	•	•	•	Clean-up of proteins/oligosaccharides, sample volumes up to 130 µl in parallel, 96-well filter plates by centrifuge, large sample series and automation
PD MidiTrap G-10	28-9180-11	•	•	•	•	•	•	•	Peptide and small protein applications, clean-up sample volumes up to 800 µl, by gravity flow
PD MiniTrap G-10	28-9180-10	•	•	•	•	•	•	•	Peptide and small protein applications, clean-up sample volumes up to 300 µl, by gravity flow
Mini Dialysis Kit - 1 kDa cut-off	80-6483-75	•	•	•	•	•	•	•	Dialysis of small sample volumes, 250 µl and 2 ml
Mini dialysis kit - 1 kDa cut off	80-6483-94	•	•	•	•	•	•	•	Dialysis of small sample volumes, max sample volume 2 ml
Mini Dialysis Kit - 8 kDa cut-off	80-6484-13	•	•	•	•	•	•	•	Dialysis of small sample volumes, 250 µl and 2 ml
Mini dialysis kit - 8 kDa cut off	80-6484-32	•	•	•	•	•	•	•	Dialysis of small sample volumes, max sample volume 2 ml
2-D Clean-Up Kit	80-6484-51	•	•	•	•	•	•	•	Removal of interfering contaminants and concentration of total protein
SDS-PAGE Clean-Up Kit	80-6484-70	•	•	•	•	•	•	•	Removal of interfering contaminants
Enzyme Regulation									
Protease Inhibitor Mix	80-6501-23	•	•	•	•	•	•	•	Protease inhibitor cocktail
Nuclease Mix	80-6501-42	•	•	•	•	•	•	•	Cocktail of nucleases for the removal of DNA and RNA from the protein sample
Fractionation									
2-D Fractionation Kit	80-6501-04	•	•	•	•	•	•	•	Fractionation of the total protein in sample in six discrete fractions
Total Protein Quantitation									
2-D Quant Kit	80-6483-56	•	•	•	•	•	•	•	Quantitation of the protein amount using a colorimetric assay
NanoVue	28-9232-16	•	•	•	•	•	•	•	Drop. Measure. Done. Spectrofotometer handling 0.5 - 2 µl sample volume

For more information on protein sample preparation, please visit www.gelifesciences.com/sampleprep

Protein Sample Preparation

Choose analysis method

2-D Electrophoresis
1-D Electrophoresis
Liquid Chromatography
From 2-D Electrophoresis
From 1-D Electrophoresis
From LC to MS
Protein Expression
Mass Spectrometry

Protein Depletion

Albumin and IgG Removal Kit	RPN6300	•	•	•								Removal of albumin and IgG from a protein sample, spin format
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Lysis/Protein Extraction

Sample Grinding Kit	80-6483-37	•	•	•									The mechanical breaking up of cells or tissue releasing the total protein content
Yeast Protein Extraction Buffer Kit	28-9440-45	•	•	•									Extraction of proteins from yeast cells
Mammalian Protein Extraction Buffer	28-9412-79	•	•	•									Extraction of proteins from mammalian cells
2-D Protein Extraction Buffer Trial Kit	28-9435-22	•	•	•									Protein extraction from tissues and cell lines trial kit with six different buffers for optimization of the method
2-D Protein Extraction Buffer-I	28-9435-23	•	•	•									Protein extraction buffer - larger volume of Buffer-I in the trial kit
2-D Protein Extraction Buffer-II	28-9435-24	•	•	•									Protein extraction buffer - larger volume of Buffer-II in the trial kit
2-D Protein Extraction Buffer-III	28-9435-25	•	•	•									Protein extraction buffer - larger volume of Buffer-III in the trial kit
2-D Protein Extraction Buffer-IV	28-9435-26	•	•	•									Protein extraction buffer - larger volume of Buffer-IV in the trial kit
2-D Protein Extraction Buffer-V	28-9435-27	•	•	•									Protein extraction buffer - larger volume of Buffer-V in the trial kit
2-D Protein Extraction Buffer-VI	28-9435-28	•	•	•									Protein extraction buffer - larger volume of Buffer-VI in the trial kit
illustra™ triplePrep kit	28-9425-44	•	•	•									Extraction of DNA, RNA and protein from the same undivided sample

Protein Concentration

Vivaspin 500, 3 kDa MWCO PES	28-9322-18	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 500 µl sample through ultrafiltration, 3 kDa cut-off
Vivaspin 500, 5 kDa MWCO PES	28-9322-23	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 500 µl sample through ultrafiltration, 5 kDa cut-off
Vivaspin 500, 10 kDa MWCO PES	28-9322-25	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 500 µl sample through ultrafiltration, 10 kDa cut-off
Vivaspin 500, 30 kDa MWCO PES	28-9322-35	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 500 µl sample through ultrafiltration, 30 kDa cut-off
Vivaspin 500, 50 kDa MWCO PES	28-9322-36	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 500 µl sample through ultrafiltration, 50 kDa cut-off
Vivaspin 500, 100 kDa MWCO PES	28-9322-37	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 500 µl sample through ultrafiltration, 100 kDa cut-off
Vivaspin 2, 3 kDa MWCO PES	28-9322-40	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 2 ml sample through ultrafiltration, 3 kDa cut-off
Vivaspin 2, 5 kDa MWCO PES	28-9322-45	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 2 ml sample through ultrafiltration, 5 kDa cut-off
Vivaspin 2, 10 kDa MWCO PES	28-9322-47	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 2 ml sample through ultrafiltration, 10 kDa cut-off
Vivaspin 2, 30 kDa MWCO PES	28-9322-48	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 2 ml sample through ultrafiltration, 30 kDa cut-off
Vivaspin 2, 50 kDa MWCO PES	28-9322-57	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 2 ml sample through ultrafiltration, 50 kDa cut-off
Vivaspin 2, 100 kDa MWCO PES	28-9322-58	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 2 ml sample through ultrafiltration, 100 kDa cut-off
Vivaspin 6, 3 kDa MWCO PES	28-9322-93	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 6 ml sample through ultrafiltration, 3 kDa cut-off
Vivaspin 6, 5 kDa MWCO PES	28-9322-94	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 6 ml sample through ultrafiltration, 5 kDa cut-off
Vivaspin 6, 10 kDa MWCO PES	28-9322-96	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 6 ml sample through ultrafiltration, 10 kDa cut-off
Vivaspin 6, 30 kDa MWCO PES	28-9323-17	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 6 ml sample through ultrafiltration, 30 kDa cut-off
Vivaspin 6, 50 kDa MWCO PES	28-9323-18	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 6 ml sample through ultrafiltration, 50 kDa cut-off
Vivaspin 6, 100 kDa MWCO PES	28-9323-19	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 6 ml sample through ultrafiltration, 100 kDa cut-off
Vivaspin 20, 3 kDa MWCO PES	28-9323-58	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 20 ml sample through ultrafiltration, 3 kDa cut-off
Vivaspin 20, 5 kDa MWCO PES	28-9323-59	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 20 ml sample through ultrafiltration, 5 kDa cut-off
Vivaspin 20, 10 kDa MWCO PES	28-9323-60	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 20 ml sample through ultrafiltration, 10 kDa cut-off
Vivaspin 20, 30 kDa MWCO PES	28-9323-61	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 20 ml sample through ultrafiltration, 30 kDa cut-off
Vivaspin 20, 50 kDa MWCO PES	28-9323-62	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 20 ml sample through ultrafiltration, 50 kDa cut-off
Vivaspin 20, 100 kDa MWCO PES	28-9323-63	•	•	•	•	•	•	•	•	•	•	•	Concentration of up to 20 ml sample through ultrafiltration, 100 kDa cut-off



Whatman products

Article number		Pack size
FTA Cards for DNA Collection, Purification and Analysis		
WB120067	FTA Kit includes 25 FTA Micro Cards, 50 mL FTA Purification Reagent, 2 Harris Uni-Core Punches with cutting mat and instructions	1/pk
WB120205	FTA Classic Card with 4 sample areas per card	100/pk
WB120055	FTA Mini Card with 2 sample areas per card	100/pk
WB120210	FTA Micro Card with 1 sample area per card	100/pk
WB120208	FTA Gene Card with 3 sample areas per card	100/pk
Indicating FTA Cards for DNA Collection, Purification and Analysis		
WB120206	Indicating FTA Classic Card with 4 sample areas per card	100/pk
WB120056	Indicating FTA Mini Card with 2 sample areas per card	100/pk
WB120211	Indicating FTA Micro Card with 1 sample area per card	100/pk
FTA Elute Cards for DNA Collection and Purification		
WB120410	FTA Elute Micro Card with 4 sample areas per card	100/pk
WB120401	FTA Elute Micro Card with 4 sample areas per card	25/pk
WB120411	Indicating FTA Elute Micro Card with 1 sample area per card	100/pk
WB120412	Indicating FTA Elute Micro Card with 1 sample area per card	25/pk
Plasmid Archiving and Analysis		
WB120028	CloneSaver 96 well format	5/pk
WB120052	CloneSaver Starter Kit, 96 well format	2/pk
WB100034	SPOT CloneSaver Holder for sample application by a liquid handler	1/pk
Plant DNA Collection, Purification and Analysis		
WB120068	FTA Plant Kit includes 20 FTA PlantSaver Cards, 2.0 mm Uni-Core Punch, 1 cutting mat, 50 mL FTA Purification Reagent, 1 pair Nitrile Gloves, 1 round bottom test tube for sample application and instructions	1/pk
WB120065	FTA PlantSaver Card with 4 sample areas per card	100/pk
Parasite DNA Collection, Purification and Analysis		
SWB120220	FTA Concentrator-PS Sample Kit	5/pk
WB120220	FTA Concentrator-PS	50/pk
WB120070	Disposable Filter Funnel, Grade 4	5/pk
FTA Purification Reagent		
WB120204	FTA Purification Reagent	500 mL
Harris Micro Punch		
WB100005	Harris Micro Punch 1.2 mm (with cutting mat)	1/pk
WB100007	Harris Micro Punch 2.0 mm (with cutting mat)	1/pk
WB100038	Harris Micro Punch 3.0 mm (with cutting mat)	1/pk
WB100025	Harris Micro Punch 1.2 mm Replacement Plunger	1/pk
WB100026	Harris Micro Punch 2.0 mm Replacement Plunger	1/pk
WB100041	Harris Micro Punch 3.0 mm Replacement Plunger	1/pk
WB100006	Replacement Tip 1.2 mm	1/pk
WB100008	Replacement Tip 2.0 mm	1/pk
WB100042	Replacement Tip 3.0 mm	1/pk
WB100020	Replacement cutting mat	1/pk
Disposable Harris Uni-Core Punch		
WB100028	Harris Uni-Core Punch 1.2 mm	4/pk
WB100029	Harris Uni-Core Punch 2.0 mm	4/pk
WB100039	Harris Uni-Core Punch 3.0 mm	4/pk
WB100040	Harris Uni-Core Punch 6.0 mm	4/pk
Multi-Barrier Pouch		
WB100036	Multi-Barrier Pouch, Small (8 × 7 cm)	100/pk
WB100037	Multi-Barrier Pouch, Large (9 × 15 cm)	100/pk
WB100024	CloneSaver Resealable Multi-Barrier Pouch	50/pk
Dessicant Packets		
WB100003	Dessicant Packets (1 gm)	1000/pk
FTA Gene Card Tray		
WB100030	FTA Gene Card Tray holds 2 Gene Cards for sample application by a liquid handler	20/pk
Buccal Cell Collection		
WB120462	EasiCollect with 1 sample area per card	50/pk
WB100032	Sterile Foam Tipped Applicators for Transfer of Buccal Cells to FTA Cards	100/pk
WB100035	Sterile Omni Swab	100/pk
Blood Stain Cards		
WB100014	Blood Stain Cards	100/pk

Selection Guide for DNA/RNA Sample

PCR and RT-PCR

Amplification method	Starting quantity	Hot Start Mix Ready-To-Go*	Hot Start Master Mix	PuReTaq Ready-To-Go*	RTG+ RT-PCR	RT-PCR Master Mix	Fidel iTaq PCR Master Mix	Fidel iTaq PCR Master Mix (2x)	Fidel iTaq RT-PCR Master Mix (2x)	Taq DNA Polymerase (Cloned)
PCR	Basic PCR (amplicon up to 3 kb)	•	•	•						•
	Hot start PCR (amplicon up to 3 kb)	•	•							
	Long-range PCR (amplicon up to 20 kb)					•	•		•	
RT-PCR	Basic RT-PCR (amplicon up to 3 kb)			•	•					
	Long-range RT-PCR (amplicon up to 6 kb)							•		
Downstream applications	Genotyping	•	•	•	•	•	•	•	•	
	Cloning & sequencing	•	•	•	•	•	•	•	•	
	Gene expression	•	•	•	•	•	•	•	•	

* Ready-To-Go is a single dose room temperature stable bead format that contains all PCR or RT-PCR components. You just need to add DNA template, primer and water for a reaction.

DNA Cleanup

Sample types	Starting quantity	ExoSAP-IT	GRX-PCR and Gel Bead	GRX-96 PCR	MicroSpin G-25	AutoSeq G-25	ProbeQuant G-50	NICK columns	NAP-5 columns	NAP-10 columns	NAP-25 columns	CyScribe GRX	MicroSpin G-50	MicroSpin S-200	MicroSpin S-300	MicroSpin S-400
PCR products	Any size, for sequencing only	•														
	50 bp to 10 kb, few samples		•													
	100 bp to 10 kb, many samples			•												
	10 to 50 bp				•											
Agarose gel slices or enzyme removal	50 kbp to 10 bp		•													
Sequencing reactions	12 to 25 µl				•											
Labeled DNA fragments	> 20 bases					•										
	> 10 bases				•											
	100 µg sample in 100 µl or no microcentrifuge						•									
Oligonucleotides	100 to 150 µl			•												
	0.1 to 0.5 ml						•									
	0.5 to 1 ml							•								
	1 to 2.5 ml								•							
cDNA	CyDye™ labeled probes											•				
A range of sample types	PCR, sequencing and labeling reactions												•			
	PCR (25 to 50 µl) or labeling reaction (25 to 50 µl) < 100 bp													•		
A range of volumes and sample sizes	PCR (25 to 50 µl) or labeling reaction (50 to 75 µl) or fragment < 200 bp														•	
	PCR (50 to 100 µl) or labeling reaction (75 to 100 µl) or remove primers > 24 bases															•
	Downstream applications	Cloning & sequencing	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Gene expression		•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Genotyping		•	•	•									•	•	•	

Sample Preparation

Plasmid DNA Preparation

Sample types	Starting quantity	plasmidPrep Mini	plasmidPrep Midi	Tempiphi Sequence Template Prep Kit*	Tempiphi 200/5500*	Tempiphi Large Construct*	Tempiphi Sequence Resolver Kit*
Bacterial culture	1 µl (high-throughput)			•			
	1 µl (low- to medium-throughput)				•		
	1 to 3 ml	•					
	25 to 500 ml		•				
Bacterial colony	< 1 colony (high-throughput)			•			
	< 1 colony (low- to medium-throughput)				•		
Bacteria glycerol stock	< 1 µl (high-throughput)			•			
	< 1 µl (low- to medium-throughput)				•		
Purified DNA (small vectors)	> 1 ng (high-throughput)			•			
	> 1 ng (low- to medium-throughput)				•		
Purified BAC/fosmid DNA	> 1 ng					•	
Difficult templates (GC rich, secondary structures)	0.1 to 1 ng						•
M13 phage plaque	< 1 plaque			•	•		
M13 phage glycerol stock	< 1 µl			•	•		
	Cloning	•	•				
Downstream applications	Sequencing	•	•	•	•	•	•

* Can be used directly for PCR and subcloning. Additional steps will be needed for transformation or transfection.

Plasmid DNA Preparation

Sample type and format	Starting quantity	RNAspin Mini	RNAspin Midi	RNAspin 96	QuickPrep mRNA	QuickPrep Micro mRNA	mRNA Purification Kit
Total RNA							
Cultured cells and tissue	Up to 200 mg tissue or 5×10^7 cells		•				
	Tube format	•					
96-well plate vacuum	10 to 30 mg or up to 2×10^6 cells			•			
96-well plate centrifuge	30 mg or up to 1×10^7 cells			•			
mRNA purification	1 to 5×10^7 cells or 0.5 g tissue				•		
Eukaryotic cells or tissue	1 to 1×10^7 cells or 100 mg tissue					•	
Eukaryotic total RNA	Total RNA or 25 mg to 1 g tissue						•
Downstream applications	Gene expression	•	•	•	•	•	•

DNA, RNA and Protein Preparation

Sample type	Starting quantity	triprep Kit
Cultured cells	$0.3 - 5 \times 10^7$ cells	•
Animal tissue	1-20 mg tissue	•
Downstream applications	Cloning & sequencing	•
	Gene expression	•
	Genotyping	•
	Protein analysis (1D, 2D, LCMS)	•

For more information on nucleic acid sample preparation, please visit www.gelifesciences.com/sampleprep

Genomic DNA Preparation

Sample types	Starting quantity (DNA yield)	tissue & cells Mini Spin	tissue & cells Midi Spin	Blood Mini Spin	blood Midi Flow	bacteria Mini Spin	BACC1	BACC2 & BACC3	Nucleon HT	Phytopure	GenomiPhi V2	GenomiPhi HV
Animal tissue	> 300 cells (4 to 7 µg DNA yield)									•	•	
	> 300 cells (40 to 50 µg DNA yield)										•	
	5 to 50 mg	•										
	Up to 200 mg		•									
Paraffin-embedded tissue or difficult samples	Up to 25 mg							•				
	30 m paraffin section							•				
Cultured cells	> 300 cells (4 to 7 µg DNA yield)										•	
	> 300 cells (40 to 50 µg DNA yield)										•	
	Up to 5.0×10^5 cells	•										
	1 to 3×10^5					•						
	Up to 2.0×10^7 cells		•									
	3×10^6 to 1×10^7 cells							•				
Blood	5 to 10 µl (4 to 7 µg DNA yield)										•	
	5 to 10 µl (40 to 50 µg DNA yield)										•	
	50 to 300 µl			•								
	1 ml					•						
	1 to 8 ml				•							
	10 ml						•					
Buffy coat	5 to 10 µl (4 to 7 µg DNA yield)										•	
	5 to 10 µl (40 to 50 µg DNA yield)										•	
	50 to 300 µl			•								
Nucleated red blood cells	10 µl (4 to 7 µg DNA yield)										•	
	10 µl (40 to 50 µg DNA yield)										•	
	10 µl			•								
	25 to 200 µl (tested)				•							
Bone marrow (suspended cells)	5 to 10 µl (4 to 7 µg DNA yield)										•	
	5 to 10 µl (40 to 50 µg DNA yield)										•	
	200 µl			•								
Bacteria (Gram - and +)	> 300 cells (4 to 7 µg DNA yield)										•	
	> 300 cells (40 to 50 µg DNA yield)										•	
	Up to 4.0×10^9				•							
Plants	1 cm leaf (4 to 7 µg DNA yield)										•	
	1 cm leaf (40 to 50 µg DNA yield)										•	
	1 seed (4 to 7 µg DNA yield)										•	
	1 seed (40 to 50 µg DNA yield)										•	
	Up to 1.0 g							•				
FTA paper/Guthrie card	3 × 3 mm piece (4 to 7 µg DNA yield)										•	
	3 × 3 mm piece (40 to 50 µg DNA yield)										•	
Buccal swab	Single swab		•									
	Single swab (4 to 7 µg DNA yield)										•	
	Single swab (40 to 50 µg DNA yield)										•	
Purified genomic DNA	> 10 ng (4 to 7 µg DNA yield)										•	
	> 10 ng (40 to 50 µg DNA yield)										•	
Downstream applications	Genotyping	•	•	•	•	•	•	•	•	•	•	•
	Cloning & sequencing	•	•	•	•	•	•	•	•	•	•	•

Ordering information

illustra Nucleic Acid Purification & Amplification

Columns	Pack size	Code No.
Genomic DNA Preparation		
Genomic DNA Purification		
illustra tissue and cells genomicPrep™ Mini Spin Kit	50	28-9042-75
illustra tissue and cells genomicPrep Mini Spin Kit	250	28-9042-76
illustra tissue and cells genomicPrep Midi Flow Kit	25	28-9042-73
illustra blood genomicPrep Mini Spin Kit	50	28-9042-64
illustra blood genomicPrep Mini Spin Kit	250	28-9042-65
illustra blood genomicPrep Midi Flow Kit	25	28-9042-61
illustra blood genomicPrep Midi Flow Kit	100	28-9042-62
illustra bacteria genomicPrep Mini Spin Kit	50	28-9042-58
illustra bacteria genomicPrep Mini Spin Kit	250	28-9042-59
Nucleon™ BACC1 Genomic DNA Kit	50	RPN8501
Nucleon BACC2 Genomic DNA Kit	50	RPN8502
Nucleon BACC3 Genomic DNA Kit	50	RPN8512
Nucleon PhytoPure™	50 × 0.1 g	RPN8510
Nucleon PhytoPure	50 × 1.0 g	RPN8511
Nucleon HT (hard tissue)	50	RPN8509

Whole Genome Amplification

illustra GenomiPhi™ V2 DNA Amplification Kit	25	25-6600-30
illustra GenomiPhi V2 DNA Amplification Kit	100	25-6600-31
illustra GenomiPhi V2 DNA Amplification Kit	500	25-6600-32
illustra GenomiPhi HY DNA Amplification Kit	25	25-6600-22
illustra GenomiPhi HY DNA Amplification Kit	100	25-6600-20
illustra GenomiPhi HY DNA Amplification Kit	1000	25-6600-25

Plasmid DNA Preparation

Plasmid DNA Purification		
illustra plasmidPrep Mini Spin Kit	50	28-9042-69
illustra plasmidPrep Mini Spin Kit	250	28-9042-70
illustra plasmidPrep Midi Flow Kit	25	28-9042-67
illustra plasmidPrep Midi Flow Kit	100	28-9042-68
Sephacryl™ S-1000 SF	750 ml	17-0476-01
Yeast Plasmid Isolation Kit	50	US79220-50RXNS

Rolling Circle Amplification – Template Amplification

illustra TempliPhi™ 100 DNA Amplification Kit	100	25-6400-10
illustra TempliPhi 500 DNA Amplification Kit	500	25-6400-50
illustra TempliPhi Sequence Template Preparation Kit	10000	25-6400-01
illustra TempliPhi Large Construct Kit	1000	25-6400-80
illustra TempliPhi Sequence Resolver Kit	20 rxns	28-9035-29
illustra TempliPhi Sequence Resolver Kit	50 rxns	28-9035-30
illustra TempliPhi Sequence Resolver Kit	200 rxns	28-9035-31

RNA Preparation

Total RNA		
illustra RNAspin Mini Kit	20	25-0500-70
illustra RNAspin Mini Kit	50	25-0500-71
illustra RNAspin Mini Kit	250	25-0500-72
illustra RNAspin Midi Kit	20	25-0500-73
illustra RNAspin 96 Kit	2 × 96	25-0500-74
illustra RNAspin 96 Kit	4 × 96	25-0500-75
illustra RNAspin 96 Kit	24 × 96	25-0500-76
illustra RNAspin 96 Filter Plate	1	25-0500-88
illustra CsTFA (solution)	100 ml	17-0847-02

mRNA

illustra QuickPrep™ Micro mRNA Purification Kit	1	27-9255-01
illustra QuickPrep mRNA Purification Kit	4	27-9254-01
illustra mRNA Purification Kit	2	27-9258-01
illustra mRNA Purification Kit	4	27-9258-02

PCR

PCR Kits & Components		
illustra Hot Start Mix RTG 0.5 ml	100 rxn	28-9006-46
illustra Hot Start Mix RTG 0.2 ml	96 rxn	28-9006-53
illustra Hot Start Mix RTG 0.2 ml	480 rxn	28-9006-54
illustra Hot Start Master Mix	100	25-1500-01
illustra PuReTaq™ Ready-To-Go™ PCR Beads 0.2 ml	96 rxn plate	27-9557-01
illustra PuReTaq Ready-To-Go PCR Beads 0.2 ml	5 × 96 rxn plate	27-9557-02
illustra PuReTaq Ready-To-Go PCR Beads 0.5 ml	100 rxn tubes	27-9558-01
illustra PuReTaq Ready-To-Go PCR Beads 0.2 ml	96 rxn h-tube	27-9559-01
FideliTaq™ PCR Master Mix (2x)	100	E71182
FideliTaq PCR Master Mix (Plus)	100	E71183
FideliTaq DNA Polymerase	50 units	27-0798-10
FideliTaq DNA Polymerase	250 units	27-0798-11
FideliTaq DNA Polymerase	1000 units	27-0798-12
FideliTaq DNA Polymerase	5 × 250 units	27-0798-13
FideliTaq DNA Polymerase	5000 units	27-0798-14
Taq DNA Polymerase (cloned)	250 units	27-0799-04
Taq DNA Polymerase (cloned)	4 × 250 units	27-0799-05
Taq DNA Polymerase (cloned)	10 × 250 units	27-0799-06
illustra Ready-To-Go RAPD Analysis Beads	100	27-9500-01
illustra Ready-To-Go RAPD Analysis Kit	100 + 6 Primers	27-9502-01

Columns	Pack size	Code No.
RT-PCR		
RT-PCR Kits & Components		
illustra Ready-To-Go RT-PCR Beads 0.5 ml	100 rxn tubes	27-9266-01
illustra Ready-To-Go RT-PCR Beads 0.2 ml	96 rxn tube	27-9267-01
illustra Ready-To-Go RT-PCR Beads 0.2 ml	96 rxn h-tube	27-9259-01
RT-PCR Master Mix (2X)	100	E78370
FideliTaq RT-PCR Master Mix (2X)	100	E71185

DNA Clean-up

Purification of PCR Products and Restriction Fragments		
illustra GFX™ PCR DNA and Gel Band Purification Kit	100	28-9034-70
illustra GFX PCR DNA and Gel Band Purification Kit	250	28-9034-71
illustra GFX 96 PCR Purification Kit	10 × 96	28-9034-45
illustra MicroSpin™ S-400 HR columns	50	27-5140-01
illustra MicroSpin S-300 HR columns	50	27-5130-01
illustra MicroSpin G-25 columns	50	27-5325-01
ExoSAP-IT™	100	US78200
ExoSAP-IT	500	US78201
ExoSAP-IT	2000	US78202

Dye Terminator Removal

illustra AutoSeq™ G-50	50	27-5340-01
illustra AutoSeq G-50	250	27-5340-02
illustra AutoSeq G-50	1000	27-5340-03
illustra MicroSpin G-50 columns	50	27-5330-01
illustra MicroSpin G-50 columns	250	27-5330-02
illustra MicroSpin S-200 HR columns	50	27-5120-01

Labeling and Clean-up

illustra CyScribe™ GFX Purification Kit	25	27-9606-01
illustra CyScribe GFX Purification Kit	50	27-9606-02
illustra NICK™ columns	20	17-0855-01
illustra NICK columns	50	17-0855-02
illustra ProbeQuant™ G-50 Micro columns	50	28-9034-08

Desalting and Nucleotide Removal

illustra MicroSpin G-25 columns	50	27-5325-01
illustra NAP™-5	20	17-0853-01
illustra NAP-5	50	17-0853-02
illustra NAP-10	20	17-0854-01
illustra NAP-10	50	17-0854-02
illustra NAP-25	20	17-0852-01
illustra NAP-25	50	17-0852-02
illustra Sephadex™ G-25 DNA Grade SF	100 g	17-0572-02
illustra Sephadex G-50 DNA Grade F	25 g	17-0573-01
illustra Sephadex G-50 DNA Grade F	100 g	17-0573-02
illustra Sephadex G-100 DNA Grade SF	100 g	17-0574-02

Nucleotides

illustra dATP, 100 mM	25 µmol	28-4065-01
illustra dATP, 100 mM	100 µmol	28-4065-02
illustra dATP, 100 mM	500 µmol	28-4065-03
illustra dCTP, 100 mM	25 µmol	28-4065-11
illustra dCTP, 100 mM	100 µmol	28-4065-12
illustra dCTP, 100 mM	500 µmol	28-4065-13
illustra dGTP, 100 mM	25 µmol	28-4065-21
illustra dGTP, 100 mM	100 µmol	28-4065-22
illustra dGTP, 100 mM	500 µmol	28-4065-23
illustra dTTP, 100 mM	25 µmol	28-4065-31
illustra dTTP, 100 mM	100 µmol	28-4065-32
illustra dTTP, 100 mM	500 µmol	28-4065-33
illustra dUTP, 100 mM	25 µmol	28-4065-41
illustra dUTP, 100 mM	100 µmol	28-4065-42
illustra dNTP Set (100 mM each A,C,G,T)	4 × 25 µmol	28-4065-51
illustra dNTP Set (100 mM each A,C,G,T)	4 × 100 µmol	28-4065-52
illustra dNTP Set (100 mM each A,C,G,T)	4 × 500 µmol	28-4065-53
illustra DNA Polymerization Mix dNTP Set (20 mM each A,C,G,T)	10 µmol	28-4065-57
illustra DNA Polymerization Mix dNTP Set (20 mM each A,C,G,T)	40 µmol (4 × 10 µl)	28-4065-58
illustra PCR Nucleotide Mix dNTP Set (25 mM each A,C,G,T)	500 µl	28-4065-60
illustra PCR Nucleotide Mix dNTP Set (2 mM each A,C,G,T)	1 ml	28-4065-62
illustra PCR Nucleotide Mix dNTP Set (10 mM each A,C,G,T)	500 µl	28-4065-64

DNA, RNA and protein preparation

illustra triplePrep Kit	50	28-9425-44
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