

MiniSpin™ Column Kits

Simple Solutions for Small Samples!

MiniSpin Column Kits

MiniSpin Columns are made in RPC solvent resistant polypropylene housings for SPE purification and desalting of small samples (5-200µL).

Applications:

- ◆ Affinity Chromatography
- ◆ Buffer Exchange
- ◆ Carbohydrate
- ◆ DNA
- ◆ Detergent Removal
- ◆ Nick Translation
- ◆ Peptide
- ◆ Primer Removal
- ◆ Protein
- ◆ Radiolabel Removal
- ◆ Removal of Salt
- ◆ Removal of Small Molecules
- ◆ Particle Removal

Product	Sample Capacity	Packed Volume	Void Vol.
Ultra MicroSpin™ Column	3-30µg	50µL	25µL
MicroSpin™ Column	5-60µg	100µL	50µL
MacroSpin™ Column	30-300µg	500µL	250µL
96-Well Spin Plate	10-100µg	150µL	75µL
96-Well MACRO-Spin Plate	30-300µg	450µL	225µL
Ultra MicroTIP Column	3-30µg	50µL	50µL
PrepTip™ microSPE Tips	0.01-6µg	1-10µL	
Empty µ-Reactors™ /w caps	2-200µL	0.1µL	
Page*Eraser™ µFilter Tips	2-200µL	0.1µL	

UltraMicroSpin and UltraMicroTIP Columns:

UltraMicroSpin and UltraMicroTIP columns offer a wide variety of packing materials including ion-exchange, silica based reverse and normal phase materials, as well as custom materials like IMAC and activated charcoal. UltraMicroSpin columns have industry standard fittings which allow use with a syringe adapter or in a centrifuge (Figure 1).

MicroSpin Columns:

MicroSpin columns have a packing volume of 100µL, which allows SEC sample volumes of 5-25µL. When used in combination with columns of different gel materials, specific separations can be achieved (Figure 2). This process offers many types of separation phase combinations.

Use any of these columns with centrifugation, vacuum or pressure to clean up your protein, DNA, or carbohydrate samples. The recovery is reproducible and there is almost no sample loss.

PAGE*Eraser™ micro filter tips prolong the life of capillary LC-MS columns by removing gel particles from in-gel digests. Recovery of peptides is quantitative from this special low volume 5µm frit.

MacroSpin Columns:

MacroSpin columns have a packing volume of 500µL, suitable for 50-150µL SEC sample volumes or up to 1mL for RPC. Due to their size, MacroSpin columns cannot be attached to a syringe. Other materials such as amino acid specific resins from BioMolecular Technologies are available for proteome fractionation using their amino acid selective chemistries. See: (<http://www.nestgrp.com/protocols/bmt/pi3index.shtml>)

96-Well Format MicroSpin Column Kits:

96-Well Format MicroSpin columns bring speed and low cost to parallel processing, micro sample preparation and are available with 20 different types of column materials. Extended tip wells eliminate cross contamination. Plates come with their own collection wells. Volume control for SEC use is recommended to improve desalting

Volume Dependent Salt Removal Results by SEC:			
96-Well MACRO-Spin Plate:	Bed	Load	Desalt %
	450µL	125µL	100%
	450µL	225µL	>99%
	450µL	450µL	78%

Figure 1. MicroSpin Column Use an adapter for MicroTip Operation

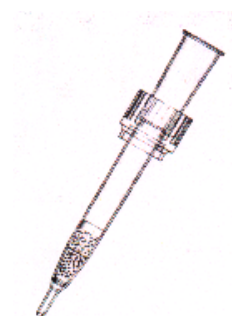


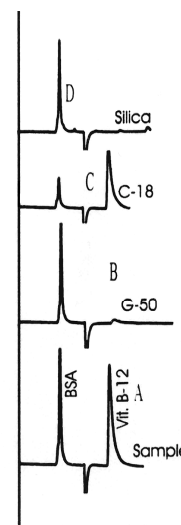
Figure 2. HPLC - Chromatograms after sample prep with MicroSpin column; Sample Vol. 20µL.

(A) Mixture of BSA (MW 68,000) and Vitamin B-12 (MW 1355).

(B) After centrifugation with G-50 (size exclusion) spin column: Smaller molecule (Vitamin B-12) is retained and BSA is eluted. This column can be used for the removal of small molecules such as salt.

(C) After centrifugation with C18V (reverse phase) spin column: BSA is retained and Vitamin B-12 is eluted. The column can be used for the analysis of small molecules such as salt after the removal of protein or large molecules.

(D) After centrifugation with Silica (normal phase) spin column: BSA is eluted and Vitamin B-12 is retained. The column can be used for the analysis of small as well as large molecules. By using different eluents, small molecules can be eluted from column after removal of large molecules.



MiniSpin Column Kits Part Numbers and Pricing

Available in packs of 96 or 24	Ultra MicroSpin (2-12µL, SEC)		Ultra Micro TIP		MicroSpin (5-25µL, SEC)		96-Well SEC 10-100µL, or 40-400µL (-L)		MacroSpin (50-150µL, SEC)	
Description	Part No.	Price	Part No.	Price	Part No.	Price	Part No.	Price	Part No.	Price
Empty Col. (20µ frit)	SUM 0000	\$146.00	N/A		SEM 0000	\$146.00	SNS 0000	\$107.00	SMM 0020	\$146.00
	SUM 0000.25	\$60.00	N/A		SEM 0000.25	\$60.00	SNS 0000-L	\$119.00	SMM 0020.25	\$60.00
Empty Col. (40µ frit)	SUM 0040	\$140.00	N/A		SEM 0040	\$140.00	N/A		SMM 0000	\$146.00
	SUM 0040.25	\$60.00	N/A		SEM 0040.25	\$60.00	N/A		SMM 0000.25	\$60.00
PAGE*Eraser 5µ micro-Filters	SUM 0007	\$140.00	N/A		SEM 0007	\$140.00	SNS 0007	\$107.00	SMM 0007	\$146.00
	SUM 0007.25	\$60.00	N/A		SEM 0007.25	\$60.00	N/A		SMM 0007.25	\$60.00
Empty µ-Reactors	SUM 0000-BW	\$175.00	N/A		SEM 0007-BW	\$175.00	N/A		N/A	
Desalting Protein/DNA	Gel Filtration		Gel Filtration		Gel Filtration		Gel Filtration		Gel Filtration	
G-10 (>700Da)	SUM S010	\$130.00	N/A		SEM S010	\$140.00	SNS S010	\$125.00	SMM S010	\$152.00
	SUM S010.25	\$53.00	N/A		SEM S010.25	\$54.00	SNS S010-L	\$139.00	SMM S010.25	\$59.00
G-25 (>5KDa)	SUM S025	\$130.00	N/A		SEM S025	\$140.00	SNS S025	\$125.00	SMM S025	\$152.00
	SUM S025.25	\$53.00	N/A		SEM S025.25	\$54.00	SNS S025-L	\$139.00	SMM S025.25	\$59.00
G-50 (>30KDa)	SUM S050	\$130.00	N/A		SEM S050	\$140.00	SNS S050	\$125.00	SMM S050	\$152.00
	SUM S050.25	\$53.00	N/A		SEM S050.25	\$54.00	SNS S050-L	\$139.00	SMM S050.25	\$59.00
G-100 (>100KDa)	SUM S100	\$130.00	N/A		SEM S100	\$140.00	SNS S100	\$125.00	SMM S100	\$152.00
	SUM S100.25	\$53.00	N/A		SEM S100.25	\$54.00	SNS S100-L	\$139.00	SMM S100.25	\$59.00
Carbohydrate	Gel Filtration		Gel Filtration		Gel Filtration		Gel Filtration		Gel Filtration	
P-2 (>2KDa)	SUM P020	\$162.00	N/A		SEM P020	\$173.00	SNS P020	\$160.00	SMM P020	\$179.00
(for glycoproteins)	SUM P020.25	\$64.00	N/A		SEM P020.25	\$70.00	SNS P020-L	\$179.00	SMM P020.25	\$75.00
P-6 (>6KDa)	SUM P060	\$162.00	N/A		SEM P060	\$173.00	SNS P060	\$160.00	SMM P060	\$179.00
(for glycoproteins)	SUM P060.25	\$64.00	N/A		SEM P060.25	\$70.00	SNS P060-L	\$179.00	SMM P060.25	\$75.00
Active Charcoal	SUM SC00	\$179.00	N/A		SEM SC00	\$179.00	SNS SC00	\$135.00	SMM SC00	\$184.00
	SUM SC00.25	\$64.00	N/A		SEM SC00.25	\$64.00	SNS SC00-L	\$151.00	SMM SC00.25	\$71.00
Cellulose	SUM SCELL	\$130.00	N/A		SEM SCELL	\$140.00	SNS SCELL	\$125.00	SMM SCELL	\$152.00
	SUM SCELL.25	\$53.00	N/A		SEM SCELL.25	\$54.00	SNS SCELL-L	\$134.00	SMM SCELL.25	\$59.00

Microchemical Extraction

2-100µL
(3-30µg)

5-100µL
(3-30µg)

5-200µL
(5-60µg)

10-100µL
(10-100µg) &
10-400µL
(10-300µg) (-L)

50-450µL
(30-300µg)

Normal Phase										
Silica (unbonded)	SUM SS10	\$130.00	STU SS10	\$113.00	SEM SS10	\$140.00	SNS SS10	\$125.00	SMM SS10	\$152.00
	SUM SS10.25	\$53.00	STU SS10.25	\$46.00	SEM SS10.25	\$54.00	SNS SS10-L	\$134.00	SMM SS10.25	\$59.00
NH2 (silica)	SUM SSNH2	\$130.00	STU SSNH2	\$113.00	SEM SSNH2	\$140.00	SNS SSNH2	\$125.00	SMM SSNH2	\$152.00
	SUM SSNH2.25	\$53.00	STU SSNH2.25	\$46.00	SEM SSNH2.25	\$54.00	SNS SSNH2-L	\$134.00	SMM SSNH2.25	\$59.00
Reversed Phase (silica)										
C-18 Vydac, 300Å	SUM SS18V	\$162.00	STU SS18V	\$148.00	SEM SS18V	\$173.00	SNS SS18V	\$157.00	SMM SS18V	\$179.00
	SUM SS18V.25	\$64.00	STU SS18V.25	\$57.00	SEM SS18V.25	\$70.00	SNS SS18V-L	\$171.00	SMM SS18V.25	\$75.00
C-8 Vydac, 300Å	SUM SS08V	\$162.00	STU SS08V	\$148.00	SEM SS08V	\$173.00	SNS SS08V	\$157.00	SMM SS08V	\$179.00
	SUM SS08V.25	\$64.00	STU SS08V.25	\$57.00	SEM SS08V.25	\$70.00	SNS SS08V-L	\$171.00	SMM SS08V.25	\$75.00
C4 Vydac, 300Å	SUM SS04V	\$162.00	STU SS04V	\$148.00	SEM SS04V	\$173.00	SNS SS04V	\$157.00	SMM SS04V	\$179.00
	SUM SS04V.25	\$64.00	STU SS04V.25	\$57.00	SEM SS04V.25	\$70.00	SNS SS04V-L	\$171.00	SMM SS04V.25	\$75.00
CN, 125Å	SUM SSCN	\$130.00	STU SSCN	\$148.00	SEM SSCN	\$140.00	SNS SSCN	\$125.00	SMM SSCN	\$152.00
	SUM SSCN.25	\$53.00	STU SSCN.25	\$57.00	SEM SSCN.25	\$54.00	SNS SSCN-L	\$134.00	SMM SSCN.25	\$59.00
Hydrophilic/IEX										
HILIC/Deter Removal	SUM HIL	\$390.00	STU HIL	\$390.00	SEM HIL	\$390.00	SNS HIL	\$370.00	SMM HIL	\$390.00
	SUM HIL.25	\$103.00	STU HIL.25	\$103.00	SEM HIL.25	\$103.00	SNS HIL-L	\$375.00	SMM HIL.25	\$103.00
DEAE (PolyWAX)	SUM HIL-DE	\$390.00	N/A		SEM HIL-DE	\$390.00	SNS HIL-DE	\$370.00	SMM HIL-DE	\$390.00
	SUM HIL-DE.25	\$103.00	N/A		SEM HIL-DE.25	\$103.00	SNS HIL-DE-L	\$375.00	SMM HIL-DE.25	\$103.00
SCX (PolySULFO)	SUM HIL-SCX	\$390.00	N/A		SEM HIL-SCX	\$390.00	SNS HIL-SCX	\$370.00	SMM HIL-SCX	\$390.00
	SUM HIL-SCX.25	\$103.00	N/A		SEM HIL-SCX.25	\$103.00	SNS HIL-SCX-L	\$375.00	SMM HIL-SCX.25	\$103.00
WCX (PolyCAT A)	SUM HIL-WCX	\$390.00	N/A		SEM HIL-WCX	\$390.00	SNS HIL-WCX	\$370.00	SMM HIL-WCX	\$390.00
	SUM HIL-WCX.25	\$103.00	N/A		SEM HIL-WCX.25	\$103.00	SNS HIL-WCX-L	\$375.00	SMM HIL-WCX.25	\$103.00
Non-Silica IEX										
SAX (CHO Based)	SUM SAX	\$162.00	N/A		SEM SAX	\$173.00	SNS SAX	\$157.00	SMM SAX	\$172.00
	SUM SAX.25	\$64.00	N/A		SEM SAX.25	\$70.00	SNS SAX-L	\$164.00	SMM SAX.25	\$72.00
WAX (CHO Based)	SUM WAX	\$162.00	N/A		SEM WAX	\$173.00	SNS WAX	\$157.00	SMM WAX	\$172.00
	SUM WAX.25	\$64.00	N/A		SEM WAX.25	\$70.00	SNS WAX-L	\$164.00	SMM WAX.25	\$72.00
SCX (CHO Based)	SUM SCX	\$162.00	N/A		SEM SCX	\$173.00	SNS SCX	\$157.00	SMM SCX	\$172.00
	SUM SCX.25	\$64.00	N/A		SEM SCX.25	\$70.00	SNS SCX-L	\$164.00	SMM SCX.25	\$72.00
WCX (CHO Based)	SUM WCX	\$162.00	N/A		SEM WCX	\$173.00	SNS WCX	\$157.00	SMM WCX	\$172.00
	SUM WCX.25	\$64.00	N/A		SEM WCX.25	\$70.00	SNS WCX-L	\$164.00	SMM WCX.25	\$72.00
Metal Affinity										
IMAC (Poros MC)	SUM IMAC	\$433.00	N/A		SEM IMAC	\$476.00	SNS IMAC	\$475.00	SMM IMAC	\$495.00
	SUM IMAC.25	\$152.00	N/A		SEM IMAC.25	\$167.00	SNS IMAC-L	\$485.00	SMM IMAC.25	\$179.00

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