

Columns for Oligonucleotides

Thermo Scientific offer DNAPac® pellicular anion-exchange resins and DNASwift™ polymeric monolithic phase specifically for the analysis of oligonucleotides.

Phase	Base Material	Substrate Crosslinking	Latex Crosslinking	Particle Size (µm)	Capacity	pH Range
DNAPac PA100	Non-porous substrate agglomerated with alkyl quaternary ammonium functionalised latex beads	55%	5%	13	40µeq	2.0 - 12.5
DNAPac PA200		55%	5%	8	40µeq	2.0 - 12.5
DNASwift SAX-1S	Polymethacrylate monolith agglomerated with quaternary amine functionalised latex	N/A	N/A	N/A	50mg of a 20mer oligonucleotide	6.0 - 12.4

DNAPac® PA100 and PA200 are strong anion-exchange columns developed to provide high resolution analysis and purification of synthetic oligonucleotides. They are capable of resolving full length from n-1, n+1 and other failure sequences and resolving oligonucleotides with secondary structures. Double-stranded DNA, such as plasmids, or restriction fragments are also separated. Unit-base resolution of synthetic oligonucleotides to 60 bases and beyond can be achieved. DNAPac PA200 offers improved efficiency and enhanced stability under alkaline conditions over DNAPac PA100. Figure 23 shows the separation of 40-60mer oligonucleotides on DNAPac PA100. Please see page 242 for ordering details.

DNASwift™ SAX-1S is a strong porous anion-exchange monolith column that provides exceptionally high purity and yield of oligonucleotides. It is compatible with high pH eluents and high temperatures and has a high sample capacity. It is ideal for therapeutic and diagnostic research.

Column: DNAPac PA100 (250 x 4mm)
Eluent: 410-510mM NaCl in 25mM Tris-Cl, pH 8.0
Flow rate: 1.5ml/min
Detection: UV 260nm

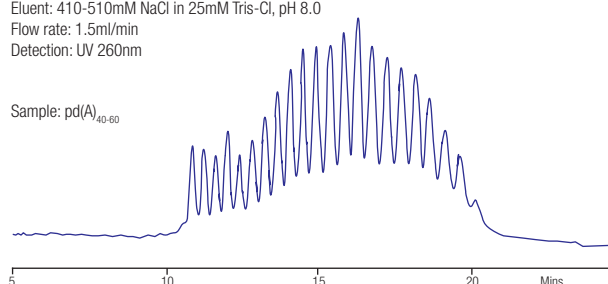


Figure 23. Separation of oligonucleotides on DNAPac PA100

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Columns for Proteomics

- High resolution in protein identification, biomarker discovery and systems biology
- High LC-MS sensitivity
- nanoViper™ fingertight connections for easy column installation

Acclaim™ PepMap has become the standard for peptide separations in proteomics and can be used with all modern nano LC systems. The 2µm Acclaim PepMap RSLC phase has been developed for ultra-high resolution analyses of tryptic, natural and synthetic peptides. Acclaim PepMap Trap columns are typically applied for the desalting of peptides before LC separation with MS detection, thus allowing fast sample preconcentration and clean-up of large volume injections. Trap columns are available in two formats:

- Fused silica nano trap columns to provide the highest chromatographic performance
- Stainless steel cartridges to provide maximum robustness

Acclaim PepMap Phase	Particle Size (µm)	Pore Size (Å)	Surface Area (m ² /g)	Carbon Load (%)	Endcapped
100C18	2, 3, 5	100	300	15	Yes
300C18	5	300	100	9	Yes
100C8	3, 5	100	300	9	Yes
300C4	5	300	100	3	Yes

PepSwift and ProSwift – PepSwift (100, 200 or 500µm i.d.) and ProSwift RP-10R (1.0mm i.d.) polystyrene-divinylbenzene monolithic columns show high sensitivity for LC-MS and are ideal for high speed peptide and protein separations.

PepMap, PepSwift and ProSwift nano columns are available with classic or nanoViper fittings. Please enquire for ordering information.

Thermo Scientific Columns for Biomolecules (continued)

Ordering Information

Reversed-phase and Ion-exchange BioBasic Phases

Column i.d. ¹ (mm)	Column Length ¹ (mm)				Drop-In Guard Cartridges (4/pk)
	50	100	150	250	
2.1	xxxxx-052130	xxxxx-102130	xxxxx-152130	xxxxx-252130	xxxxx-012101 ² !
3.0	xxxxx-053030	xxxxx-103030	xxxxx-153030	xxxxx-253030	xxxxx-013001 ² !
4.6	xxxxx-054630	xxxxx-104630	xxxxx-154630	xxxxx-254630	xxxxx-014001 ³ !

¹ Other dimensions available

² Use with Uniguard direct connect holder 852-00

³ Use with Uniguard direct connect holder 850-00

When ordering please replace 'xxxxx' with the appropriate BioBasic material code.

BioBasic 18 xxxxx=72105 BioBasic 8 xxxxx=72205 BioBasic 4 xxxxx=72305 BioBasic AX xxxxx=73105 BioBasic SCX xxxxx=73205

Please note that not all phases are available in every dimension.

Ion Exchange Phases – ProPac and ProSwift

ProPac Phase	Column Dimensions (mm)			
	250 x 2 ¹	250 x 4 ¹	250 x 9	250 x 22
WCX-10	063472	054993	063474	SP5482
SCX-10	063456	054995	063700	SP5522
WAX-10	063464	054999	063707	SP5598
SAX-10	063448	054997	063703	SP5594
MABPac SCX-10 ²	075604	074625	-	-

¹ Guard columns available

² Other dimensions available

Column Dimensions (mm)	ProSwift Phase			
	WCX-1S	SCX-1S	WAX-1S	SAX-1S
50 x 1.0	066643	071977	066642	068459
50 x 4.6	064295	066765	064294	064293

Size Exclusion Phases – BioBasic

BioBasic Phase	Column Dimensions (mm)		Guard (30 x 7.8mm)
	150 x 7.8	300 x 7.8	
SEC 60	73305-157846	73305-307846	73305-037821
SEC 120	73405-157846	73405-307846	73405-037821
SEC 300	73505-157846	73505-307846	73505-037821
SEC 1000	73605-157846	73605-307846	73605-037821

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DNAPac Phase	Column Dimensions (mm)			
	250 x 2	250 x 4	250 x 9	250 x 22
PA100	SP3686	043010	043011	SP2091
PA200	063425	063000	063421	SP6734