

RESINS FOR PREPARATIVE BIOSEPARATIONS










	Bulk Stationary phases	Base material	Particle size* (µm)	Pore size* (nm)	pH range	Target molecules and typical application in DSP		Mode	
IEX	AEX	BioPro IEX Q75	75	porous	2.0–12.0	Capturing and high-scale purification of proteins and oligos, removal of DNA and HCP	C CIP	Charge -	
		BioPro IEX SmartSep Q30	30	porous	2.0–12.0	Large-scale polishing and purification of proteins, peptides, VLPs, oligos and plasmids	I P CIP		
		BioPro IEX SmartSep Q20	20	porous	2.0–12.0	Large-scale polishing and purification of proteins, peptides, VLPs, oligos and plasmids	I P CIP		
		BioPro IEX SmartSep Q10	10	porous	2.0–12.0	Polishing of protein, peptide and oligo purification at high resolution	P CIP		
	CEX	BioPro IEX S75	75	porous	2.0–12.0	Capturing and high-scale purification of proteins, removal of HCP	C CIP	Charge +	
		BioPro IEX SmartSep S30	30	porous	2.0–12.0	Large-scale polishing and purification of proteins, peptides, antibodies	I P CIP		
		BioPro IEX SmartSep S20	20	porous	2.0–12.0	Large-scale polishing and purification of proteins, peptides, antibodies	I P CIP		
		BioPro IEX SmartSep S10	10	porous	2.0–12.0	Polishing of protein and peptide purification at high resolution	P CIP		
SEC	YMC*Gel Diol-HG-120	High grade silica	10, 15, 20, 50	12	5.0–7.5	Purification of small proteins, separation from aggregates	P	Size	
	YMC*Gel Diol-HG-200	High grade silica	10, 15, 20	20	5.0–7.5	Purification of intermediate and larger proteins, nanodiscs, separation from aggregates	P		
	YMC*Gel Diol-HG-300	High grade silica	10, 15, 20	30	5.0–7.5	Purification of large proteins, complexes, antibodies, VLPs and lipoproteins	P		
Reversed Phase	C18	YMC-Triart Prep C18-S	7, 10, 15, 20	12	2.0–10.0	Purification of biologicals in acidic, neutral and basic conditions, sample desalting and concentration	I P CIP	Hydrophobicity	
		YMC*Gel ODS-A-HG	10, 15, 20, 50	8, 12, 20, 30	2.0–7.5	Purification of small proteins and peptides	I P		
		YMC*Gel ODS-AQ-HG	10, 15, 20, 50	8, 12, 20	2.0–7.5	Purification of more polar biomolecules like nucleic acids, sample desalting and concentration	C I P		
	YMC Omega	Classical silica	10, 20, 50	proprietary	2.0–7.5	Purification of polyunsaturated fatty acids	C I P		
	C8	YMC-Triart Prep C8-S	organic/inorganic hybrid silica	10, 15, 20	12, 20	2.0–10.0	Capturing and intermediate purification of larger proteins in acidic, neutral and basic conditions		I P CIP
		YMC-Triart Prep Bio200 C8	organic/inorganic hybrid silica	10	20	2.0–10.0	Purification of larger peptides, specifically insulin at broad pH-range		I P CIP
		YMC*Gel C8-HG	High grade silica	10, 15, 20, 50	12, 20, 30	2.0–7.5	Capturing and intermediate purification of larger proteins		C I P
		YMCbasic	Classical silica	10	20	2.0–7.5	Purification of peptides and basic compounds		I P
	Ph	YMC-Triart Prep Phenyl-S	organic/inorganic hybrid silica	10	12	2.0–10.0	Purification of peptides and small proteins in acidic, neutral and basic conditions		I P CIP
		YMC*Gel Ph-HG	High grade silica	10, 15, 20, 50	12, (20, 30)	2.0–7.5	Purification of proteins with low/intermediate hydrophobicity		C I P
C4	YMC*Gel C4-HG	High grade silica	10, 15, 20, 50	12, 20, 30	2.0–7.5	Separation of protein isoforms, aggregate removal, removal of HCP	C I P		

*not all combinations of particle and pore size are available

C Capturing I Intermediate purification P Polishing CIP CIP-compatible

YMC SAMPLE OPTIONS FOR PREPARATIVE CHROMATOGRAPHY

	Sample Type	Figure	Features / Properties	Available dimensions																																																						
Biochromatography	Screening kits		Kits containing 5 polypropylene columns with 1 or 5 mL of resin Compatible with Äkta and comparable LC systems Available for BioPro IEX resins with particle sizes: 20, 30 and 75 µm	26 mm x 7.0 mm (1 mL variant) 26 mm x 15.6 mm (5 mL variant) Single-format: 5 cartridges with identical resin Mixed-format: 4 cartridges with 30 µm and 75 µm resins, each as „S“ and „Q“ variant respectively																																																						
	MiniChrom™ columns		Pre-packed polypropylene screening columns Compatible with Äkta and comparable LC systems	<table border="1"> <thead> <tr> <th colspan="3">Stock format, available on short notice:</th> <th colspan="3">Further formats:</th> </tr> <tr> <th>ID (mm)</th> <th>Length (mm)</th> <th>Volume (mL)</th> <th>ID (mm)</th> <th>Length (mm)</th> <th>Volume (mL)</th> </tr> </thead> <tbody> <tr> <td>8.0</td> <td>100</td> <td>5.0</td> <td>5.0</td> <td>10</td> <td>0.2</td> </tr> <tr> <td></td> <td></td> <td></td> <td>5.0</td> <td>25</td> <td>0.5</td> </tr> <tr> <td></td> <td></td> <td></td> <td>5.0</td> <td>50</td> <td>1.0</td> </tr> <tr> <td></td> <td></td> <td></td> <td>8.0</td> <td>20</td> <td>1.0</td> </tr> <tr> <td></td> <td></td> <td></td> <td>8.0</td> <td>50</td> <td>2.5</td> </tr> <tr> <td></td> <td></td> <td></td> <td>11.3</td> <td>50</td> <td>5.0</td> </tr> <tr> <td></td> <td></td> <td></td> <td>11.3</td> <td>100</td> <td>10.0</td> </tr> </tbody> </table>	Stock format, available on short notice:			Further formats:			ID (mm)	Length (mm)	Volume (mL)	ID (mm)	Length (mm)	Volume (mL)	8.0	100	5.0	5.0	10	0.2				5.0	25	0.5				5.0	50	1.0				8.0	20	1.0				8.0	50	2.5				11.3	50	5.0				11.3	100	10.0
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Packed analytical columns		Pre-packed PEEK scout columns Available for all BioPro IEX resins	250 mm x 4.6 mm ID PEEK 100 mm x 4.6 mm ID PEEK																																																							
Bulk samples		Resin for self-packing of screening columns Various packaging sizes available Available for all BioPro IEX resins	50 mL 250 mL other dimensions available on request																																																							
RoboColumns®		Rack format For automated screening via Tecan and Perkin Elmer sampler robots Customized formats possible with individually packed rows of columns (1 resin each)	<table border="1"> <thead> <tr> <th colspan="3">Stock format, available on short notice:</th> <th colspan="3">Further formats:</th> </tr> <tr> <th>ID (mm)</th> <th>Length (mm)</th> <th>Volume (µL)</th> <th>ID (mm)</th> <th>Length (mm)</th> <th>Volume (µL)</th> </tr> </thead> <tbody> <tr> <td>5.0</td> <td>10.0</td> <td>200</td> <td>5.0</td> <td>2.5</td> <td>50</td> </tr> <tr> <td></td> <td></td> <td></td> <td>5.0</td> <td>5.0</td> <td>100</td> </tr> <tr> <td></td> <td></td> <td></td> <td>5.0</td> <td>22.5</td> <td>450</td> </tr> <tr> <td></td> <td></td> <td></td> <td>5.0</td> <td>25.0</td> <td>500</td> </tr> <tr> <td></td> <td></td> <td></td> <td>5.0</td> <td>30.0</td> <td>600</td> </tr> </tbody> </table>	Stock format, available on short notice:			Further formats:			ID (mm)	Length (mm)	Volume (µL)	ID (mm)	Length (mm)	Volume (µL)	5.0	10.0	200	5.0	2.5	50				5.0	5.0	100				5.0	22.5	450				5.0	25.0	500				5.0	30.0	600													
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Reversed Phase / Normal Phase	Packed analytical columns		Pre-packed stainless-steel scout columns Analytical HPLC columns packed with preparative bulk Available for all types of YMC RP/NP bulk media Available for all particle sizes	Typical dimensions: 250 mm x 4.6 mm ID stainless-steel column 150 mm x 4.6 mm ID stainless-steel column 250 mm x 10 mm ID stainless-steel column 150 mm x 10 mm ID stainless-steel column																																																						
	Bulk samples		Stationary phase media for self-packing Various quantities and packaging sizes available Available for all types of YMC RP/NP bulk media	Flexible, customized sample formats																																																						

RoboColumns and MiniChrom are registered trademarks of Repligen Corporation. Bulk stationary phases for preparative BioLC 12/2020