

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	Charge – C CIP
		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	Charge + C CIP
		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	10, 15, 20, 50	12	5.0–7.5	Purification of small proteins, separation from aggregates	Size ↑ P
		YMC*Gel Diol-HG-200	10, 15, 20	20	5.0–7.5	Purification of intermediate and larger proteins, nanodiscs, separation from aggregates	P
		YMC*Gel Diol-HG-300	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
		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	10, 20, 50	proprietary	2.0–7.5	Purification of polyunsaturated fatty acids	C I P
	C8	YMC-Triart Prep C8-S	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	10	20	2.0–10.0	Purification of larger peptides, specifically insulin at broad pH-range	I P CIP
		YMC*Gel C8-HG	10, 15, 20, 50	12, 20, 30	2.0–7.5	Capturing and intermediate purification of larger proteins	C I P
		YMCbasic	10	20	2.0–7.5	Purification of peptides and basic compounds	I P
	Ph	YMC-Triart Prep Phenyl-S	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	10, 15, 20, 50	12, (20, 30)	2.0–7.5	Purification of proteins with low/intermediate hydrophobicity	C I P
	C4	YMC-Triart Prep C4-S	10	12	2.0–10.0	Purification of oligonucleotides and peptides in acidic, neutral and basic conditions	I P CIP
		YMC*Gel C4-HG	10, 15, 20, 50	12, 20, 30	2.0–7.5	Separation of protein isoforms, aggregate removal, removal of HCP	C I P

Capturing
 Intermediate purification
 Polishing
 CIP-compatible

*not all combinations of particle and pore size are available

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	Stock format, available on short notice: ID (mm) Length (mm) Volume (mL) 8.0 100 5.0		Further formats: ID (mm) Length (mm) Volume (mL) 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
	Packed analytical columns		Pre-packed PEEK scout columns Available for all BioPro IEX resins	150 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 diemensions 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)	Stock format, available on short notice: ID (mm) Length (mm) Volume (µL) 5.0 10.0 200		Further formats: ID (mm) Length (mm) Volume (µL) 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
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		

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Bulk stationary phases for preparative BioLC 03/2023