BULK STATIONARY PHASES FOR PREPARATIVE CHROMATOGRAPHY

		STATIONARY PHASE	PHASE CHARACTERISTICS	PARTICLE SIZE* (µm)	PORE SIZE* (nm)	CARBON LOAD** (%C)	pH RANGE	TYPICAL APPLICATIONS
		YMC-Triart Prep C18-S	pH-stable organic/inorganic hybrid silica, most versatile phase, 100% aqueous stable	7, 10, 15, 20	12	20	2.0–10.0	acidic, neutral, basic compounds, peptides, oligonucleotides, small molecules, amino acids, APIs, sugars
	C18	YMC*Gel ODS-A-HG	classical versatile, silica-based C18 phase with improved mechanical stability	10, 15, 20, 50	8, 12, 20, 30	20, 17, 12, 7	2.0-7.5	peptides, proteins, amino acids, pharmaceuticals
		YMC*Gel ODS-AQ-HG	classical silica-based polar RP phase with improved mechanical stability, 100% aqueous stable	10, 15, 20, 50	8, 12, 20	15, 14, 10	2.0–7.5	peptides, nucleic and amino acids, pharmaceuticals, in particular for more polar compounds
_	C8	YMC-Triart Prep C8-S	pH-stable organic/inorganic hybrid silica, general purpose phase, medium hydrophobicity	10, 15, 20	12, 20	17, 13	2.0–10.0	acidic, neutral, basic compounds, peptides, oligonucleotides, small molecules, amino acids, APIs
Reversed Phase		YMC-Triart Prep Bio200 C8	pH-stable organic/inorganic hybrid silica, specifically designed for peptide and oligonucleotide purification	10	20	14	2.0–10.0	peptides (especially insulin, insulin-like peptides), proteins, oligonucleotides
		YMC*Gel C8-HG	classical silica-based C8 phase with improved mechanical stability, medium hydrophobicity	10, 15, 20, 50	12, 20, 30	10, 7, 4	2.0-7.5	peptides, proteins, pharmaceuticals
		YMCbasic	specifically designed for the separation of basic compounds and peptides	10	20	7	2.0-7.5	small molecules, peptides (specifically insulin), basic compounds
	\bigcirc	YMC*Gel Ph-HG	bonded phenyl group for π electron interactions	10, 15, 20, 50	12, (20, 30)	9	2.0-7.5	phenols, fullerenes, sweeteners, aromatics
	C4	YMC*Gel C4-HG	classical silica-based C4 phase with improved mechanical stability, less hydrophobic modification	10, 15, 20, 50	12, 20, 30	7, 5, 3	2.0-7.5	proteins, antibodies, peptides
	5	YMC*Gel TMS-HG	classical silica-based C1 phase with improved mechanical stability, very low hydrophobicity	10, 15, 20, 50	12, (20, 30)	4	2.0-7.5	(water-soluble) vitamins
		YMC Omega	specifically designed for the separation of polyunsaturated fatty acids	10, 20, 50	proprietary	15	2.0-7.5	polyunsaturated fatty acids, EPA, DHA
2	Diol	YMC*Gel NH ₂ -HG (Amino)	classical silica-based amino phase, primary amino derivative, high coverage monomeric bonding chemistry	10, 15, 20, 50	12, (20, 30)	3	2.0-7.5	sugars, nucleotides, (water-soluble) vitamins
Phase/HIL	CN	YMC*Gel CN-HG (Cyano)	classical silica-based cyano phase, polar, hydrophobic and $\pi\text{-}\pi\text{-}$ interactions	10, 15, 20, 50	12, (20, 30)	7	2.0-7.5	RP, NP, SFC, HILIC, proteins, steroids, catechols, nitroaromatics
	NH_2	YMC*Gel Diol-HG	less polar alternative to unmodified silica, polar and hydrophobic characteristics	10, 15, 20, 50	12, 20, 30	_	2.0-7.5	NP, SFC, HILIC, small organic molecules, (fat-soluble) vitamins, tocopherols, steroids, phenols
Normal		YMC*Gel SIL-HG (Silica)	unmodified silica with high purity and improved mechanical stability	10, 15, 20, 50	6, 8, 12, 20, 30	_	_	NP, SFC, HILIC, small organic molecules, (fat-soluble) vitamins, tocopherols, steroids
		YMC*Gel SIL (Silica)	classical high purity silica for LPLC/MPLC and flash chromatography, larger particle sizes	50, 75, 150	6, 12	_	_	small organic molecules, (fat-soluble) vitamins, tocopherols, steroids
IEX		BioPro IEX Q75	high binding capacity, hydrophilic polymer base particle, strong anion exchanger	75	porous		2.0–12.0	monoclonal antibodies, proteins and peptides, IgG, oligonucleotides
		BioPro IEX S75	high binding capacity, hydrophilic polymer base particle, strong cation exchanger	75	porous		2.0–12.0	monoclonal antibodies, proteins and peptides, IgG
		BioPro IEX SmartSep Q10/20/30	high resolution and mechanical strength, hydrophilic polymer base particle, strong anion exchanger	10, 20, 30	porous		2.0–12.0	monoclonal antibodies, proteins and peptides, IgG, oligonucleotides
		BioPro IEX SmartSep S10/20/30	high resolution and mechanical strength, hydrophilic polymer base particle, strong cation exchanger	10, 20, 30	porous		2.0–12.0	monoclonal antibodies, proteins and peptides (e.g. insulin), IgG,
SEC		YMC*Gel Diol-HG-120	maximum efficiency for gel filtrations, MW range: 5 to 100 kDa	10, 15, 20, 50	12		5.0-7.5	intermediate proteins, oligosaccharides
		YMC*Gel Diol-HG-200	maximum efficiency for gel filtrations, MW range: 5 to 300 kDa	10, 15, 20	20		5.0-7.5	large proteins, polysaccharides
		YMC*Gel Diol-HG-300	maximum efficiency for gel filtrations, MW range: 20 to 1,000 kDa	10, 15, 20	30		5.0–7.5	very large proteins, antibodies, polysaccharides
Chiral	Polysaccharides	CHIRAL ART Amylose-C	coated derivative [alternative to CHIRALPAK® AD]	10, 20	proprietary		_	NP, SMB and SFC mode, wide application range for chiral separations
		CHIRAL ART Amylose-C Neo	coated derivative [alternative to CHIRALPAK® AD], extended resolution and loadability	10, 20	proprietary		_	NP, SMB and SFC mode, wide application range for chiral separations
		CHIRAL ART Cellulose-C	coated derivative [alternative to CHIRALCEL® 0D]	10, 20	proprietary		_	NP, SMB and SFC mode, wide application range for chiral separations
		CHIRAL ART Amylose-SA	immobilised derivative [alternative to CHIRALPAK® IA]	10, 20	proprietary	_	2.0-9.0	NP, SMB, SFC and RP mode, wide application range for chiral separations
		CHIRAL ART Cellulose-SB	immobilised derivative [alternative to CHIRALPAK $^{\otimes}$ IB]	10, 20	proprietary	_	2.0-9.0	NP, SMB, SFC and RP mode, wide application range for chiral separations
	-	CHIRAL ART Cellulose-SC	immobilised derivative [alternative to CHIRALPAK $^{\otimes}$ IC]	10, 20	proprietary	_	2.0-9.0	NP, SMB, SFC and RP mode, wide application range for chiral separations
		CHIRAL ART Cellulose-SJ	immobilised derivative [alternative to coated CHIRALCEL $^{\otimes}$ OJ]	10, 20	proprietary	—	2.0-9.0	NP, SMB, SFC and RP mode, wide application range for chiral separations

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YMC BULK MEDIA SAMPLE OPTIONS FOR PREPARATIVE CHROMATOGRAPHY

Sample Type		Figure	Features / Properties	Available dimensions
/ Normal Phase	Packed analytical columns	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
Reversed Phase	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
	Screening kits	VMC MC-BioPro	Kits containing 5 polypropylene columns with 1 or 5 mL of resin	26 mm x 7.0 mm (1 mL variant) 26 mm x 15.6 mm (5 mL variant)
			Compatible with Akta and comparable LC systems Available for BioPro IEX resins with particle sizes: 20, 30 and 75 μm	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) Further formats: ID (mm) Length (mm) Volume (mL) 8.0 100 5.0 5.0 10 0.2 5.0 5.0 50 10 0.2 5.0 50 10 0.2 5.0 50 10 0.2 5.0 50 10 0.2 8.0 50 25 1.0 8.0 50 2.5 11.3 50 11.3 100 10.0 10.0
Biochromatography	Packed analytical columns	RIGW	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 1 L 5 L 10 L
	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: Further formats: ID (mm) Length (mm) Volume (μL) ID (mm) Length (mm) Volume (μL) 5.0 10.0 200 5.0 200 5.0 2.5 5.0 200 5.0 100 5.0 2.5 50 50 5.0 2.5 50 50 5.0 2.5 50 50 5.0 2.5 450 5.0 5.0 25.0 500 5.0 5.0 30.0 600 50

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