

Agilent BioHPLC Columns – Your Complete Solution for Biopharma Analysis

Trusted performance. Proven results. More chemistries and choices for solving your toughest separation challenges.



Recommended Applications:								
Peptides Oligonucleotides Proteins/mAbs/ADCs AAV/VLPs Non-ionic Surfactant Metabolites Glycans								
	BioHPLC Columns	Chemistry	Particle Sizes(s)	Pore Size(s)	Temperature Limit	pH Range	Pressure Limit	Benefits and Applications
	AdvanceBio Peptide Mapping		2.7 µm	120 Å	60 °C	2–8	600 bar	Peptide characterization with excellent peak shape and efficiency.
	Altura Peptide Plus AdvanceBio Peptide Plus		2.7 µm	100 Å	90 °C	1–11	600 bar	Alternative selectivity with high pH tolerance, improved peak shape under formic acid and high sample load conditions.
	Altura Oligo HPH-C18 AdvanceBio Oligonucleotide		2.7, 4 µm	100 Å	65 °C	3–11	600 bar	Oligonucleotide separations. Columns are batch tested to ensure consistent performance.
	Altura ZORBAX Eclipse Plus C18		1.8 µm	95 Å	60 °C	2–9	1200 bar	Peptide separations. Good starting point for LC method development.
	ZORBAX 300SB-C18		1.8, 3.5, 5, 7 µm	300 Å	80 °C	1–8	1200 bar (1.8 µm) 400 bar (3.5 – 7 µm)	Excellent stability and peak shape at acidic and high temperature conditions
	ZORBAX 300SB-C8		1.8, 3.5, 5, 7 µm	300 Å	80 °C	1–8	1200 bar (1.8 µm) 400 bar (3.5 – 7 µm)	Low pH and high temperature with reduced retention of hydrophobic analytes versus C18.
	ZORBAX 300SB-C3		1.8, 3.5, 5, 7 µm	300 Å	60 °C	1–8	1200 bar (1.8 µm) 400 bar (3.5 – 7 µm)	Low pH and high temperature with reduced retention of hydrophobic analytes versus C8.
	ZORBAX 300SB-Diphenyl		1.8 µm	300 Å	80 °C	1–8	1200 bar	Alternative selectivity for aromatic compounds with pi-pi interactions.
	ZORBAX 300SB-CN		3.5, 5, 7 µm	300 Å	80 °C	1–8	400 bar	Polar molecules separation optimal at low pH or high temperature conditions.
	ZORBAX 300Extend-C18		3.5, 5 µm	300 Å	40 °C at pH >8 60 °C at pH <8	2–11.5	400 bar	Robust performance and long lifetimes under high pH conditions.
	Poroshell 300SB-C18		5 µm	300 Å	90 °C	1–8	400 bar	Ideal for fast separations of proteins and peptides.
	Poroshell 300SB-C8		5 µm	300 Å	90 °C	1–8	400 bar	Fast separations with reduced retention of hydrophobic analytes versus C18.
	Poroshell 300SB-C3		5 µm	300 Å	90 °C	1–8	400 bar	Fast separations with reduced retention of hydrophobic analytes versus C8.
	Poroshell 300Extend-C18		5 µm	300 Å	40 °C at pH >8 60 °C at pH <8	2–11.5	400 bar	Fast separations coupled to unique chemistry that improves lifetimes under high pH conditions.
	AdvanceBio RP-mAb C4		3.5 µm	450 Å	90 °C	1–8	600 bar	Wide pore size designed for mAb and other large proteins for intact or subunit analysis.
	AdvanceBio RP-mAb SB-C8		3.5 µm	450 Å	90 °C	1–8	600 bar	Wide pore size with increased retention of hydrophobic analytes versus C4.
	AdvanceBio RP-mAb Diphenyl		3.5 µm	450 Å	90 °C	1–8	600 bar	Alternative selectivity with wide pore size designed for mAb and other large proteins.
	AdvanceBio Surfactant Profiling		3.5 µm	300 Å	80 °C	1–8	600 bar	Characterize polysorbates and other surfactant degradation products. Columns are batch tested to ensure consistent performance.
	Altura PLRP-S PLRP-S		3, 5, 8, 10, 20, 30, 50 µm	100 Å 300 Å 1000 Å 4000 Å	200 °C	1–14	275 bar (3 µm) 207 Bar (5 – 10 µm) 103 bar (20 – 50 µm)	Polymeric chemistry with no bonded phase required. Ideal for small molecule, synthetic biomolecule, and macromolecule analysis and purification.
	Altura Poroshell HILIC-Z		2.7 µm	100 Å	80 °C	2–12	600 bar	Zwitterionic stationary phase offers alternative selectivity to other HILIC phases.
	AdvanceBio Amide HILIC		1.8 µm	300 Å	80 °C	2–7	1200 bar	Maximum separation performance for glycan analysis with improved peak capacity and temperature stability compared to the AdvanceBio Glycan Mapping column.
	AdvanceBio Glycan Mapping		1.8, 2.7 µm	120 Å 300 Å	40 °C	2–7	600 bar (2.7 µm) 1200 bar (1.8 µm)	Designed and manufactured to deliver fast, high-resolution, reproducible glycan identification.
	AdvanceBio HIC		3.5 µm	450 Å	60 °C	2–8	400 bar	Delivers high-resolution intact separations of native proteins, including mAbs, ADCs, and others.

Ion Exchange Chromatography

Bio IEX

Nonporous polymer particles for high-resolution, high-recovery ion-exchange separations of oligonucleotides, proteins, and peptides. Available in SCX, WCX, SAX, and WAX chemistries in 1,7, 3, 5, and 10 µm nonporous particle sizes.

Bio MAb

WCX, nonporous polymer columns optimized for charge-variant analysis of monoclonal antibodies and related biotherapeutics. Available in 1,7, 3, 5, and 10 µm particle sizes.

Bio-Monolith IEX

Monolithic ion-exchange columns enabling high-resolution, rapid separations of large biomolecules, including antibodies, plasmid DNA, viruses, and phages. Available in SCX, SAX, and WAX phases.

PL-SAX

Strong anion-exchange resins with high hydrophilicity for biomolecule purification. Ideal for proteins and synthetic oligonucleotides under native or denaturing conditions. Available in 5, 8, 10, and 30 µm particle sizes with 1000 or 4000 Å pore sizes.

PL-SCX

Strong cation-exchange columns based on macroporous PS/DVB particles with a hydrophilic surface. 1000 Å pores ensures efficient mass transfer across broad biomolecule sizes. 5–30 µm particle sizes enable fully scalable purification workflows.

ZORBAX Ion Exchange columns

Silica-based ion-exchange columns available in SAX and SCX phases. Packed with 5 µm bonded silica particles for efficient protein, peptide, and oligonucleotide separations.

Size Exclusion Chromatography

Altura SEC and AdvanceBio SEC

1.9 µm (120 Å and 200 Å)
High-efficiency, high-resolution SEC columns with stability up to 620 bar for high-throughput analysis. 200 Å pore size optimized for simultaneous separation of mAb dimers, monomers, and fragments.

2.7 µm (130 Å, 300 Å, 500 Å, 1000 Å)
Robust SEC columns with a unique hydrophilic coating to minimize secondary interactions. Deliver optimized aggregate and fragment separations for peptides, mAbs, and large biotherapeutics including AAVs, VLPs, and mRNA.

Bio SEC-3

Bio SEC-3 HPLC columns use 3 µm silica with a bonded hydrophilic coating for efficient, reproducible SEC separations. Pore sizes of 100 Å, 150 Å, and 300 Å support a wide range of peptides and proteins.

Bio SEC-5

Bio SEC-5 HPLC columns deliver stable, high-resolution SEC performance using 5 µm silica with a neutral hydrophilic coating. Available in pore sizes from 100 Å to 2000 Å, with low operating pressures.

Affinity Chromatography

Bio-Monolith Affinity columns

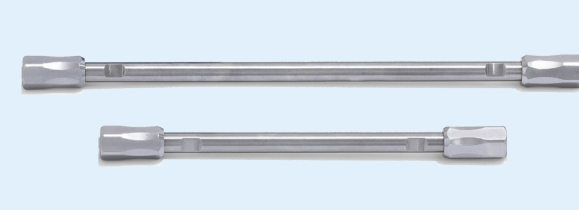
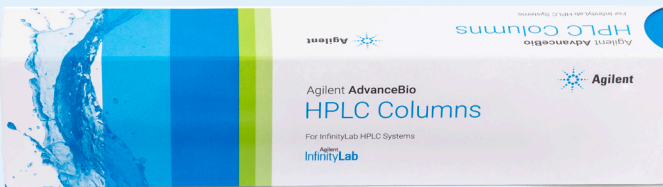
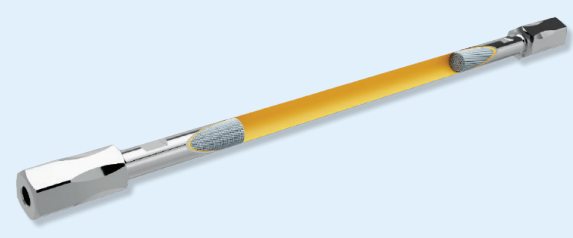
Protein A and Protein G monolithic affinity columns for analytical separation of all IgG subclasses. Enable sub-1-minute mAb titer quantitation and mAb capture for downstream CQA analysis, readily integrated into 2D-LC workflows.

What column id and length should I choose?

Format	Comment
Column id	4.6 mm for legacy methods 3.0 mm for lower solvent use than 4.6 mm 2.1 mm for lowest solvent use and MS applications
Column Length	Shorter 30 to 100 mm for faster separations Longer 150 to 250 mm for increased resolution

Reach new heights in performance with Ultra Inert technology

Altura columns feature our innovative Ultra Inert technology, unlocking the true separation potential of the stationary phase. Experience superior chromatographic performance, faster equilibration, and enhanced sensitivity for your most challenging metal-sensitive analytes.



For more information about BioHPLC columns and bio consumables for critical quality attributes (CQAs), visit www.agilent.com/columns/biohplc