

# LC columns for biomolecules

## MULTIPLE TECHNIQUES FOR FULL CHARACTERIZATION

The diversity of biomolecule structure and properties coupled with matrix complexity demands a range of sample separation modes, column chemistries, column configurations and detection techniques for their effective characterization.

Thermo Scientific addresses these needs with silica and polymeric columns specifically designed to handle the unique rigors of the analysis of proteins, peptides, oligonucleotides and other biomolecules.

Column	Separation Mode	Suitable for
MABPac™ SCX-10	Ion-Exchange	Characterization and QC assessment of mAbs and other proteins Separation of closely related charge variants such as deamidation, phosphorylation, sialylation and lysine truncation
ProPac™ SCX-10 ProPac™ WCX-10 ProPac™ SAX-10 ProPac™ WAX-10	Ion-Exchange	Routine charge variant profiling/screening of proteins, glycoproteins and monoclonal antibodies (mAbs) Separation of closely related charge variants
ProSwift™ WAX-1S ProSwift™ WCX-1S ProSwift™ SAX-1S ProSwift™ SCX-1S	Ion-Exchange	Fast protein separations
DNAPac™ PA100 DNAPac™ 200	Ion-Exchange	Ultra high resolution analysis and purification of oligonucleotides
DNASwift™	Ion-Exchange	High-resolution, laboratory scale purification of DNA and RNA oligonucleotides
BioBasic™ AX BioBasic™ SCX	Ion-Exchange	Separations of proteins, peptides and small molecules Low ion-exchange capacity for LC-MS applications
MABPac™ Protein A	Affinity	Fast, accurate mAbs titer analysis
ProSwift™ ConA-1S	Affinity	High capacity enrichment and purification of Concanavalin A binding glycans, glycopeptides and proteins
ProPac™ IMAC-10	Affinity	Impurity removal through highly selective separations of metal binding proteins by immobilized metal affinity chromatography at analytical and preparative scale
MABPac™ SEC-1	Size Exclusion	High resolution SEC columns for monoclonal antibody (mAb) analysis, including monomers, aggregates, and fragments
BioBasic™ SEC 60 BioBasic™ SEC 120 BioBasic™ SEC 300 BioBasic™ SEC 1000	Size Exclusion	Separations of proteins and biomolecules over a wide molecular weight range
ProSwift™ RP-1S ProSwift™ RP-2H ProSwift™ RP-3U ProSwift™ RP-4H	Reversed-Phase	High throughput intact protein separation
MABPac™ RP	Reversed-Phase	Higher resolution using reversed phase for accurate mass determination of intact monoclonal antibody, fragments, antibody drug conjugates (ADCs), and proteins

Column	Separation Mode	Suitable for
DNAPac™ RP	Reversed-Phase	Reversed-phase analysis of oligonucleotides and double-stranded (ds) DNA/RNA fragments
BioBasic™ 18 BioBasic™ 8 BioBasic™ 4	Reversed-Phase	Analytical and preparative scale reversed-phase separations of peptides and proteins
Acclaim™ 300 C18	Reversed-Phase	High efficiency analytical scale reversed-phase separations of peptides and proteins
EASY-Spray™	Reversed-Phase	Ultra-high sensitivity and efficiency nano scale separations
Acclaim™ PepMap	Reversed-Phase	Primary structure analysis such as peptide mapping, PTM identification, biomarker discovery and systems biology at the nano, capillary and micro scale
PepSwift™	Reversed-Phase	High speed peptide and protein separations Sample desalting
Accucore™ 150-C18 Accucore™ 150-C4	Reversed-Phase	High efficiency peptide and protein separations at low backpressure
ProPac™ HIC-10	Hydrophobic Interaction	QC Process purification of biopharmaceuticals High resolution protein and mab separation under non-denaturing conditions at analytical and preparative scale
MAbPac™ HIC-10 MAbPac™ HIC-20 MAbPac™ HIC-Butyl	Hydrophobic Interaction	ADCs, higher resolution columns for the separation of Antibody Drug Conjugates, Monoclonal antibodies,(including methionine and tryptophan oxidation variants) and related biologics, under non-denaturing conditions.
GlycanPac™ AXR-1 GlycanPac™ AXH-1	Mixed-mode	High resolution separation glycans and glycan isomer ; native or fluorescent labeled

For more information contact us [www.eu.fishersci.com](http://www.eu.fishersci.com)

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Austria: +43(0)800-20 88 40 Belgium: +32 (0)56 260 260 Denmark: +45 70 27 99 20  
Germany: +49 (0)2304 9325 Ireland: +353 (0)1 885 5854 Italy: +39 02 950 59 478  
Finland: +358 (0)9 8027 6280 France: +33 (0)3 88 67 14 14 Netherlands: +31 (0)20 487 70 00  
Norway: +47 22 95 59 59 Portugal: +351 21 425 33 50 Spain: +34 902 239 303  
Sweden: +46 31 352 32 00 Switzerland: +41 (0)56 618 41 11 UK: +44 (0)1509 555 500

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