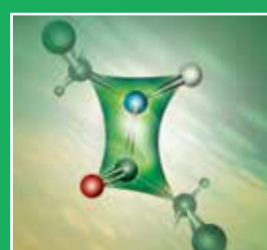


BIOSEPARATIONS AND ANALYSES: COLUMNS FOR HPLC, UHPLC, AND UPLC

HPLC and UHPLC Technology

UPLC Technology



Peptide Separations

Reversed-Phase Columns

- XBridge® Peptide BEH C₁₈, 130Å
- XBridge Peptide BEH C₁₈, 300Å
- XSelect® Peptide CSH C₁₈, 130Å
- Symmetry300™ C₁₈
- BioSuite™ pC₁₈

- ACQUITY UPLC® Peptide BEH C₁₈, 130Å
- ACQUITY UPLC Peptide BEH C₁₈, 300Å
- ACQUITY UPLC Peptide CSH C₁₈, 130Å

Size-Exclusion Columns

- XBridge Protein BEH SEC, 125Å

- ACQUITY UPLC Protein BEH SEC, 125Å

Ion-Exchange Columns

- BioSuite Q, DEAE, SP, and CM
- Protein-Pak™ Hi Res Q, SP, and CM

- Protein-Pak Hi Res Q, SP, and CM

Standards and Reagents

- MassPREP™ Protein Digestion Standards
- Cytochrome c Digestion Standard
- Quantitative Peptide Retention Standard
- BEH125 SEC Protein Standard Mix
- IEX Cation Test Standard
- IEX Anion Test Standard
- RapiGest™ SF Surfactant

- MassPREP Protein Digestion Standards
- Cytochrome c Digestion Standard
- Quantitative Peptide Retention Standard
- BEH125 SEC Protein Standard Mix
- IEX Cation Test Standard
- IEX Anion Test Standard
- RapiGest SF Surfactant



Protein Separations

Reversed-Phase Columns

- XBridge Protein BEH C₄, 300Å
- Delta-Pak™ C₄
- MassPREP On-Line Desalting
- BioSuite pPhenyl
- Symmetry300 C₄

- ACQUITY UPLC Protein BEH C₄, 300Å
- MassPREP Micro Desalting

Size-Exclusion Columns

- XBridge Protein BEH SEC, 125Å
- XBridge Protein BEH SEC, 200Å
- XBridge Protein BEH SEC, 450Å
- BioSuite UHR, HR, and SEC

- ACQUITY UPLC Protein BEH SEC, 125Å
- ACQUITY UPLC Protein BEH SEC, 200Å
- ACQUITY UPLC Protein BEH SEC, 450Å

Ion-Exchange Columns

- Protein-Pak HR Q, DEAE, SP, and CM (glass)
- BioSuite Q, DEAE, SP, and CM

- Protein-Pak Hi Res Q, SP, and CM

Hydrophobic-Interaction Columns

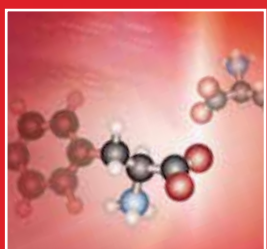
- Protein-Pak Hi Res HIC
- BioSuite Phenyl HIC

- Protein-Pak Hi Res HIC

Standards and Reagents

- MassPREP Protein Standard Mix
- BEH125 SEC Protein Standard Mix
- BEH200 SEC Protein Standard Mix
- BEH450 SEC Protein Standard Mix
- IEX Cation Test Standard
- IEX Anion Test Standard
- HIC Protein Standard Mix
- Intact mAb Mass Check Standard
- RapiGest SF Surfactant

- MassPREP Protein Standard Mix
- BEH125 SEC Protein Standard Mix
- BEH200 SEC Protein Standard Mix
- BEH450 SEC Protein Standard Mix
- IEX Cation Test Standard
- IEX Anion Test Standard
- HIC Protein Standard Mix
- Intact mAb Mass Check Standard
- RapiGest SF Surfactant



Amino Acid Analysis

Reversed-Phase Columns

- AccQ•Tag™
- Pico•Tag®

- AccQ•Tag Ultra

Standards and Reagents

- Amino Acid Standards, Hydrolysate
- AccQ•Tag Derivatization Kit
- Pico•Tag Derivatization Kit

- Amino Acid Standards, Hydrolysate
- AccQ•Tag Ultra Derivatization Kit



Oligonucleotide Separations

Reversed-Phase Columns

- XBridge Oligonucleotide BEH C₁₈, 130Å

- ACQUITY UPLC Oligonucleotide BEH C₁₈, 130Å

Ion-Exchange Columns

- Gen-Pak™ FAX
- Protein-Pak Hi Res Q

- Protein-Pak Hi Res Q

Standards and Reagents

- MassPREP Oligonucleotide Standard

- MassPREP Oligonucleotide Standard



Glycan and Glycoprotein Separations

Hydrophilic-Interaction Columns

- XBridge Glycan BEH Amide, 130Å

- ACQUITY UPLC Glycan BEH Amide, 130Å
- ACQUITY UPLC Glycoprotein BEH Amide, 300Å

Standards and Reagents

- GlycoWorks™ RapiFluor-MS™ N-Glycan Kit—96 and 24 sample
- RapiFluor-MS and 2-AB Glycan Performance Test Standards
- RapiFluor-MS, 2-AB and 2-AA Dextran Calibration Ladders

- GlycoWorks RapiFluor-MS N-Glycan Kit—96 and 24 sample
- RapiFluor-MS and 2-AB Glycan Performance Test Standards
- RapiFluor-MS, 2-AB and 2-AA Dextran Calibration Ladders
- Glycoprotein Performance Test Standard

Designed and QC tested with relevant biomolecules to help ensure consistency.

BIOSEPARATIONS COLUMNS www.waters.com/biosep ■ ANALYTICAL STANDARDS AND REAGENTS asr.waters.com



Alliance HPLC

HPLC Technology

- Dispersion > 30 µL
- Columns: 3.0–4.6 mm I.D., 3–10 µm particles
- Recommended column: 4.6 mm I.D., 5 µm particles
- Typical operating pressure: < 6,000 PSI



ACQUITY Arc

LC Categories

UHPLC Technology

- Dispersion 12–30 µL
- Columns: 2.1–4.6 mm I.D., 1.7–5 µm particles
- Recommended column: 3.0 mm I.D., 2.5 µm particles
- Typical operating pressure: < 10,000 PSI



ACQUITY H-Class Bio

UPLC Technology

- Dispersion < 12 µL
- Columns: 1.0–4.6 mm I.D., 1.6–5 µm particles
- Recommended column: 2.1 mm I.D., 1.7 µm particles
- Typical operating pressure: < 15,000 PSI

Primary Manufacturer of Chromatographic Media

- Waters maintains a Quality Management System in compliance with ISO 9001:2008.
- Waters owns and controls every step of the process, from raw materials to final product (few suppliers are capable of doing this). Understanding and controlling our processes makes the difference in product performance in your laboratory.

Waters

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