

High Performance Liquid Chromatograph

Nexera Quaternary System



Nexera

Quaternary System

(Low-Pressure Gradient System)

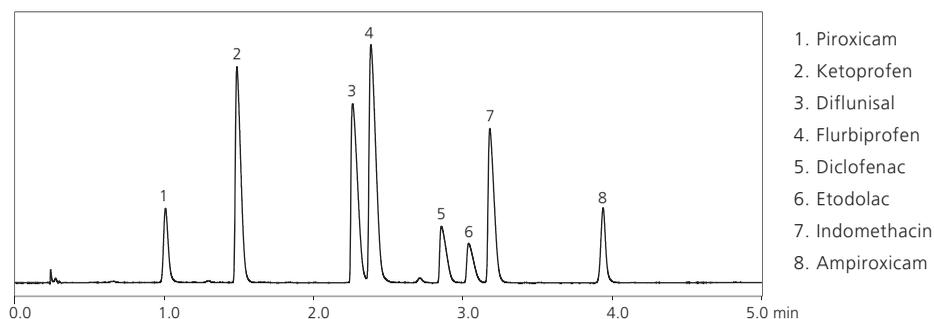


- Capable of 4-solvent gradient analysis at UHPLC system pressures up to 130 MPa
- Seamless method transfer from conventional HPLC to UHPLC
- Highly accurate solvent delivery ensures reliable analysis
- Applicable for a wide range of applications, including method development

Nexera Quaternary adopts a low-volume gradient unit with minimized gradient delay, achieving 4-solvent low-pressure gradient analysis at pressures up to 130 MPa. In addition, it offers seamless method transfer and supports a variety of configurations for use in a wide range of analyses, including method development.

Nexera Quaternary system achieves 4-solvent gradient analysis at pressures up to 130 MPa

Compatible with maximum 4-solvent gradient at UHPLC pressures up to 130 MPa, the world's highest, the Nexera Quaternary system can be utilized for a wide range of applications, from conventional HPLC to UHPLC. Its design allows users to pre-set 4 solvents, enabling the use of multiple combinations of solvents in the method development process. This makes the method development process more efficient while reducing the labor associated with preparing solvents.



1. Piroxicam
2. Ketoprofen
3. Diflunisal
4. Flurbiprofen
5. Diclofenac
6. Etodolac
7. Indomethacin
8. Ampiroxicam

Analysis of 8 compounds of Non-Steroidal Anti-Inflammatory Drugs

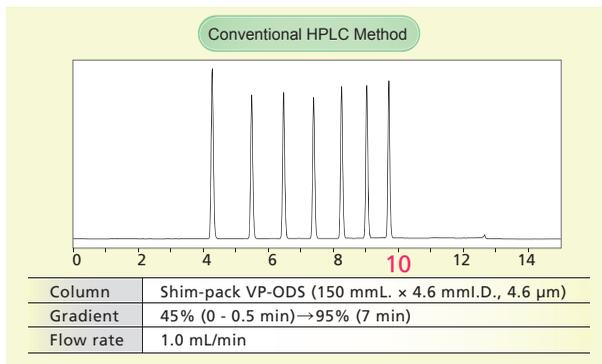
Column	Shim-pack XR-ODS (50 mmL. x 3.0 mmI.D., 2.2 μm)
Mobile phase	A: 10 mmol/L Ammonium acetate (pH 6.6) B: Acetonitrile C: Methanol
Gradient	B.Conc 15%(0 min)→B.Conc 35%(5 min) C.Conc 15%(0 min)→C.Conc 35%(5 min)
Flow rate	1.0 mL/min

Seamless transfer from conventional HPLC to UHPLC

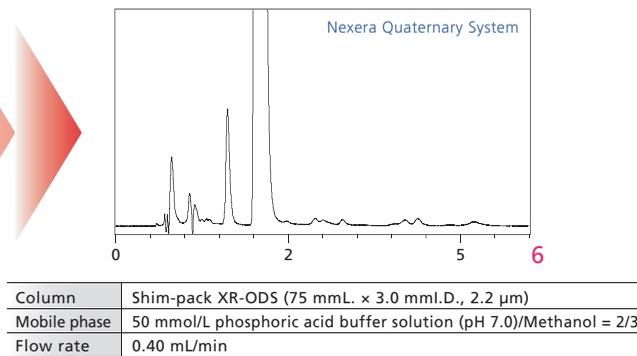
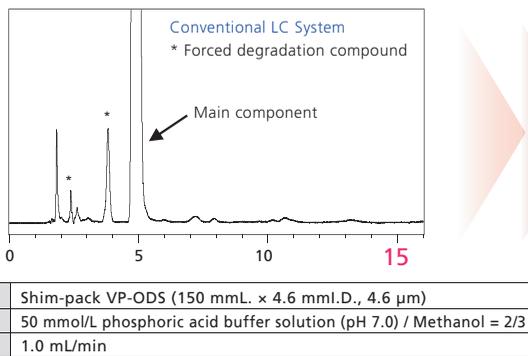
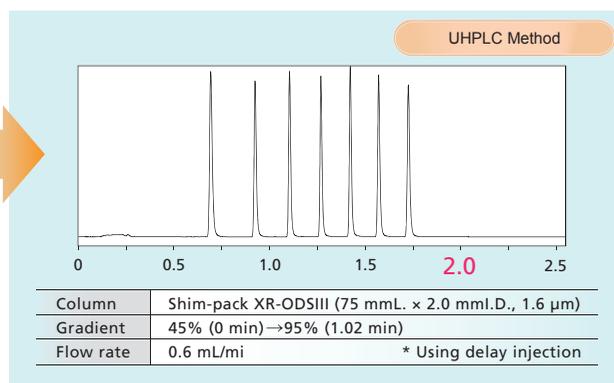
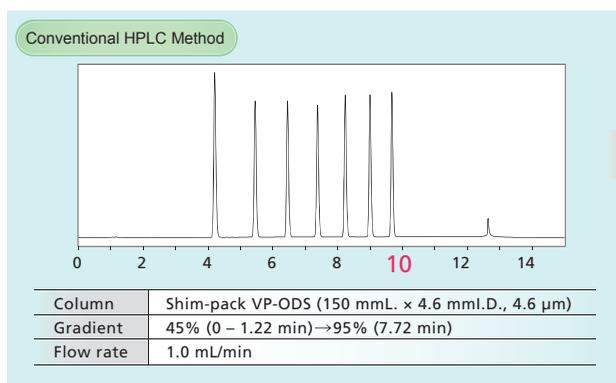
In addition to replicating existing conventional LC methods, Nexera Quaternary allows seamless transfer of methods from conventional HPLC to UHPLC.

* Gradient analysis of 7 alkylphenone compounds

Replicate existing method



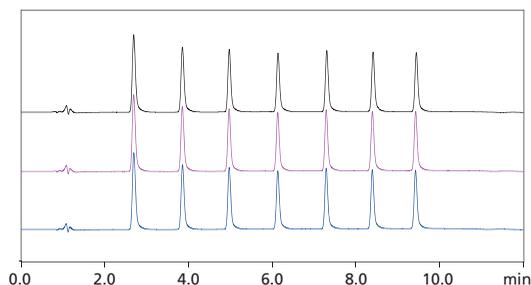
Speed up existing method



Ultrafast analysis of sodium rabeprazole

Highly accurate solvent delivery ensures reliable analysis

The Nexera Quaternary system utilizes Nexera's high-level solvent delivery performance to achieve precise analysis, even at low flow rates, expanding the range of analyses that can be performed.



Column	Shiseido CAPCELL PAK MGII (150 mmL. × 1.0 mmI.D., 3.0 μm)
Mobile phase	A: Water B: Acetonitrile
Gradient	B.Conc 45% (0-0.5 min) → 95% (8.0-10.0 min)
Flow rate	0.08 mL/min

* Using delay injection

Gradient analysis of 7 alkylphenone compounds



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