

Intelligent Versatile Compliant



LC3500

Ultra-High Performance Liquid Chromatography

FantasEra™ UHPLC SYSTEM

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WAYEAL Analytical
Instrument Cloud Platform



WAYEAL Science & Technology
Official Account

2603-603201

COMPANY PROFILE

Anhui Wayeal Science and Technology Co., Ltd. (hereinafter referred to as "WAYEAL") was established in 2003 and listed on the Shanghai Stock Exchange STAR Market in 2020, becoming the first STAR Market listed company in Anhui Province (Stock Code: 688600).

As a global professional supplier of precision scientific instruments, WAYEAL's business primarily covers four major areas: industrial testing instruments, online monitoring instruments, laboratory analytical instruments, and medical and life science instruments. The company currently has over 1,100 employees, with business operations encompassing more than 20 countries worldwide.

WAYEAL has always adhered to its strategy of R&D innovation and product leadership. In recent years, the company has continuously increased its R&D investment, with annual R&D expenditure accounting for approximately 20% of revenue. It has successively established research platforms including a postdoctoral research workstation, an academician workstation, and a national-level enterprise technology center. The company has been recognized as a national-level specialized and sophisticated "Little Giant" enterprise and a national intellectual property demonstration enterprise.

In the future, WAYEAL will uphold the corporate spirit of "Quality WAYEAL, Service WAYEAL," and strive to become an enterprise with strong international competitiveness in the fields of precision scientific instruments and life and health sciences, and to become a responsible and respected model of Chinese enterprises!

**20+YEARS**

Dedication and Accumulation

300+

R&D Personnel

300+

Cumulative Patents

15PIECES

National and Industry Standards Participated in Drafting



DEVELOPMENT HISTORY OF LIQUID CHROMATOGRAPHY TECHNOLOGY

2008

UV Detector

**2011**

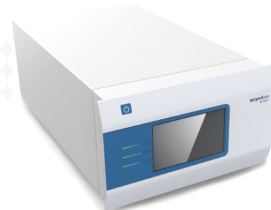
LC3000 Series (Single Pump)

**2012-2013**LC3100 Series
(Binary Pump + Autosampler)**2016**LC3100 Series
(Binary/Quaternary pump + Column Oven)**2016**

Diode Array Detector

**2018**

Fluorescence Detector

**2018**LC3200 Series Classic, Pressure Threshold 45 MPa
(Binary/Quaternary pump + Full Range of Detectors)**2019**Evaporative
Light Scattering
Detector**2022**LC3600 Series Concultra,
Pressure Threshold 150 MPa**2024**

Refractive Index Detector

**2024**LC3400 Series Advanced,
Pressure Threshold 75 MPa**2025****LC3500**

Ultra-High Performance Liquid Chromatograph

FantasEra™ UHPLC
SYSTEM

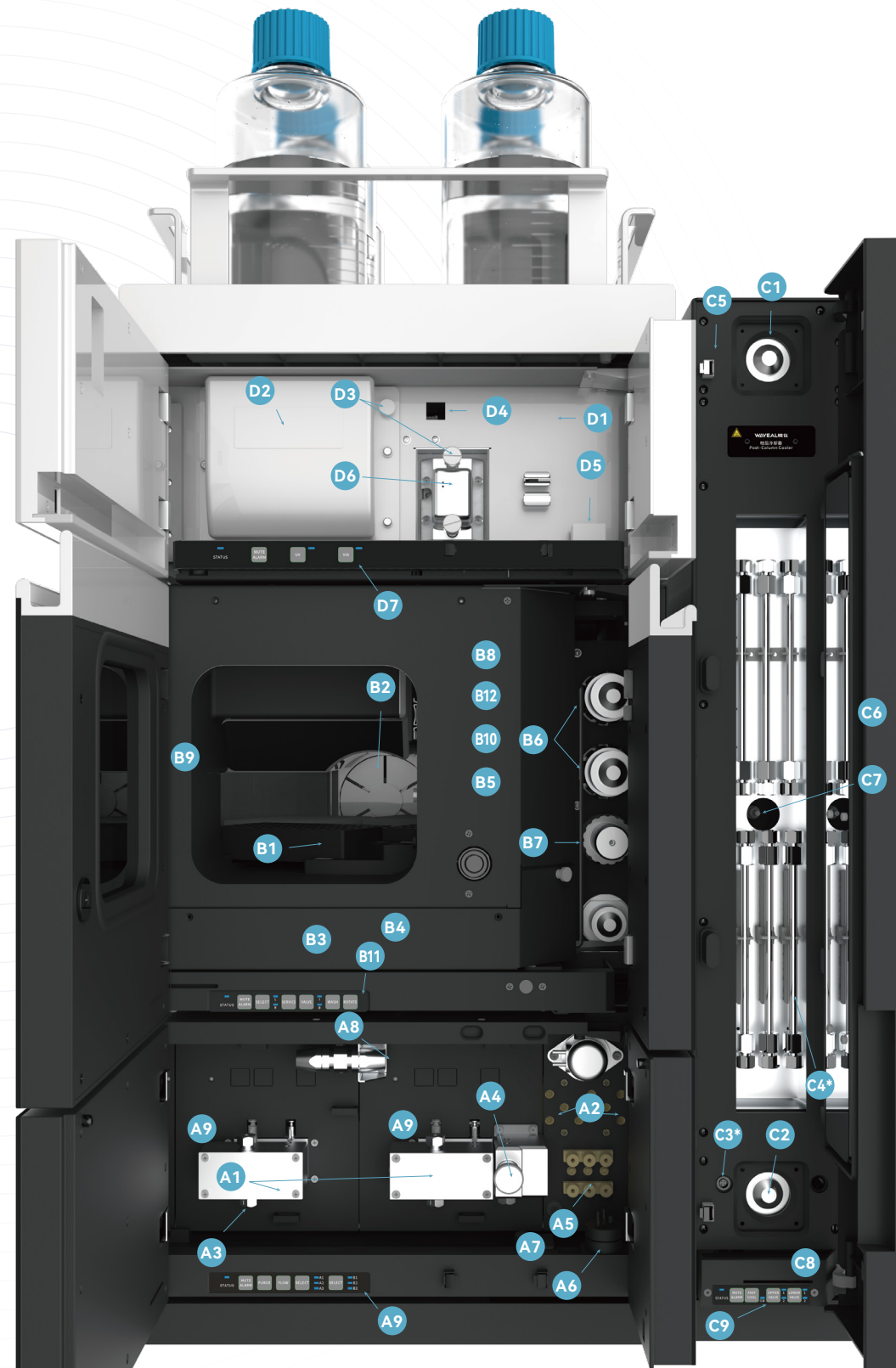
TYPICAL CONFIGURATION (LC3500)

DAD3500

- D1: Standard triple temperature control system: optical chamber temperature control, lamp chamber temperature control, and flow cell temperature control
D2: Standard long-life deuterium lamp and tungsten lamp
D3: Front panel maintenance/replacement for lamps and flow cell
D4: Flow cell information module and lamp information module
D5: Leak sensor module
D6: Multiple flow cell assemblies, including ultra-high performance, ultra-fast, and high-efficiency flow cells, etc.
D7: Front panel buttons, including mute, deuterium lamp switch, and tungsten lamp switch

AS3500

- B1: Standard 216-vial (2mL) sample tray, compatible with 96-well plates, 384-well plates, and other sample tray types, supporting insert vial configuration.
B2: Standard refrigeration module with precise temperature control.
B3: Standard diaphragm pump for active removal of small amounts of condensation generated after temperature control
B4: Standard two-inlet one-outlet solenoid valve, combined with metering pump washing to form a triple wash system
B5: Standard dual needle seat and multi-wash port structural module
B6: Standard single high-pressure valve, with optional dual high-pressure valve to expand to dual ternary flow path
B7: Standard high-precision metering pump module for liquid aspiration, online derivatization, and other operations
B8: Flow-through needle system, standard 50 μL injection needle and high-pressure resistant needle seat, with optional 100 μL to 1000 μL injection needles
B9: Supports external expansion compartment
B10: QR code scanning function for direct identification of sample tray type
B11: Front panel buttons, including mute, needle seat selection, needle lift for maintenance, wash, and sample tray rotation
B12: Supports injection needle hard object protection and empty vial alarm functions.



The LC3500 liquid chromatography series is WAYEAL's flagship product, incorporating over 20 years of experience, expertise, and a series of innovative designs.

With "stability and reliability" as its core foundation and "user needs" as the design starting point—from basic scientific research to production quality control, from routine testing to complex matrix analysis—the system is always committed to helping users accurately obtain better detection results and extract richer data information, making every analysis more valuable.

This system and its supporting solutions provide customers with a wide range of options, suitable for any application and budget requirements.

As its name "FantasEra" (Fantastic Era) suggests, this revolutionary system aims to "break through tradition and comprehensively improve efficiency," reshaping the HPLC analysis experience: combining the advantages of fast separation for production quality control transfer, high sample throughput, ease of use, high precision, high accuracy, multi-brand method consistency, and a powerful workflow coordination system to meet all the needs of chromatography professionals for liquid phase work.

Truly ushering in a "Fantastic Era" of HPLC detection through technological innovation.

P3500

- A1: Binary six-channel solvent module
A2: Three-inlet one-outlet valve selection module
A3: Acetonitrile-resistant check valve
A4: Manual purge valve module
A5: Degasser module
A6: Seal wash solution monitoring module
A7: Leak sensor module
A8: Mixer assembly, standard 400 μL
A9: Primary and secondary pump pressure sensor module
A9: Front panel buttons, including mute, purge, flow rate start/stop, and flow path selection

CT3500

- C1: Upper high-pressure valve module (post-column), supporting 2-position 6-port, 2-position 10-port, and 6-position 7-port configurations
C2: Lower high-pressure valve module (pre-column), supporting 2-position 6-port, 2-position 10-port, and 6-position 7-port configurations
C3: Active pre-heating module (not installed; see column oven section for details)
C4: Passive pre-heating module (not installed; see column oven section for details)
C5: Column oven information module
C6: Built-in gas leak sensor module
C7: Fan circulation module
C8: Leak sensor module
C9: Front panel buttons, including mute, rapid cooling, upper valve switching, and lower valve switching

INTRODUCTION TO PUMP

Advantages

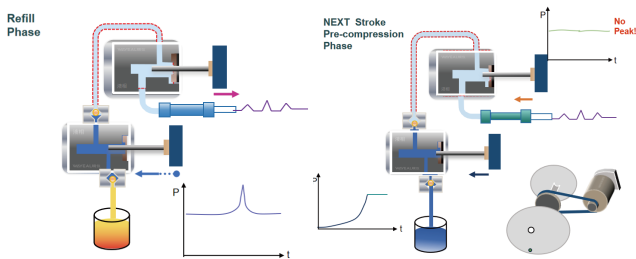
- Dual technology options of linear motor pump and serial cam pump, with flow path supporting binary six-channel configuration
- The binary six-channel configuration enables both fast gradient operation and further expands flushing, maintenance, and subsequent application scenarios
- Standard 316L stainless steel pump head, with optional titanium alloy and PEEK pump heads
- The LC3500 system can withstand pressure up to 105 MPa, with upgraded versions capable of reaching 130 MPa and 145 MPa
- Latest highly compatible acetonitrile-resistant check valve, featuring durable sealing, easy maintenance, and stability
- Active seal washing combined with seal monitoring provides full lifecycle protection for seals, significantly extending seal life and maintaining stable operating conditions over the long term
- Precise 1~99% gradient ratio
- Electronic pulsation suppression technology achieves extremely low pressure fluctuation



Electron Pulsation Suppression

WAYEAL's fourth-generation pulsation suppression algorithm is based on core technologies including "Electronic Cam Drive Technology" (Patent No.: CN102953965A), "Dual Plunger Coordinated Control Technology" (Patent No.: CN201310175832.2), and "Dynamic Compression Compensation Technology" (Patent No.: CN103590993A). After years of real-world validation and algorithm iteration, this latest technological achievement delivers a performance leap, achieving extremely low pressure fluctuation with superior flow rate precision and accuracy.

- Self-developed high-pressure resistant, low-volume, high-sensitivity pressure sensor for real-time pressure feedback;
- Dynamic flow compensation overcomes the operational challenges of dual plunger coordination;
- Real-time solvent viscosity monitor with synchronized plunger speed adjustment achieves stable delivery regardless of solvent composition.

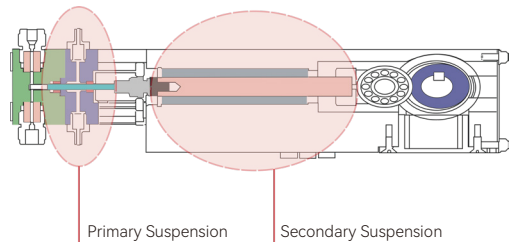


Secondary Suspension

The "patented technology based on secondary suspension transmission" (Patent No.: 201210266733.0) combines drive floating technology with advanced pump head floating plunger design, upgrading the dual plunger cam pump from "rigid transmission" to "flexible operation."

Compared to traditional rigid connection methods, this significantly extends seal service time, substantially reduces maintenance downtime frequency, and lowers user costs.

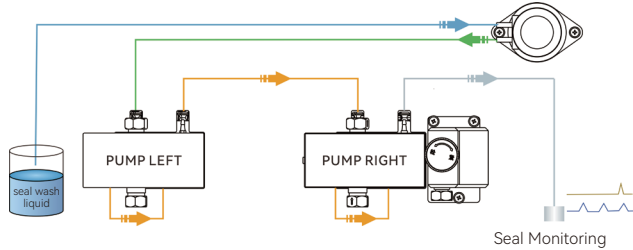
It also enhances high-pressure stability and adapts to complex operating conditions.



Active Cleaning with Sealing Ring Leak Detection

Active cleaning combined with wash liquid monitoring forms a full-cycle protection system: "preventive measures (cleaning and lubrication) - in-process protection (liquid level monitoring) - post-event warning (micro-leak alerts)." This enables seals to maintain stable performance even under high-frequency, high-pressure operation, extending service life by more than 50% compared to single cleaning liquid, and significantly reducing maintenance costs and downtime losses.

- Active cleaning of the plunger and seal promptly removes salt precipitation and particulate, preventing hard particles from scratching the plunger.
- Effective lubrication of the plunger prevents dry friction and effectively extends seal life.
- Combined with seal monitoring, the system alerts users promptly when the seal wash liquid runs empty, reminding them to replenish.
- When a micro-leak occurs in the seal, the monitoring system detects the leak and guides users to replace the seal promptly during the micro-leak stage, preventing unplanned downtime due to severe leakage and ensuring experiment or production continuity.



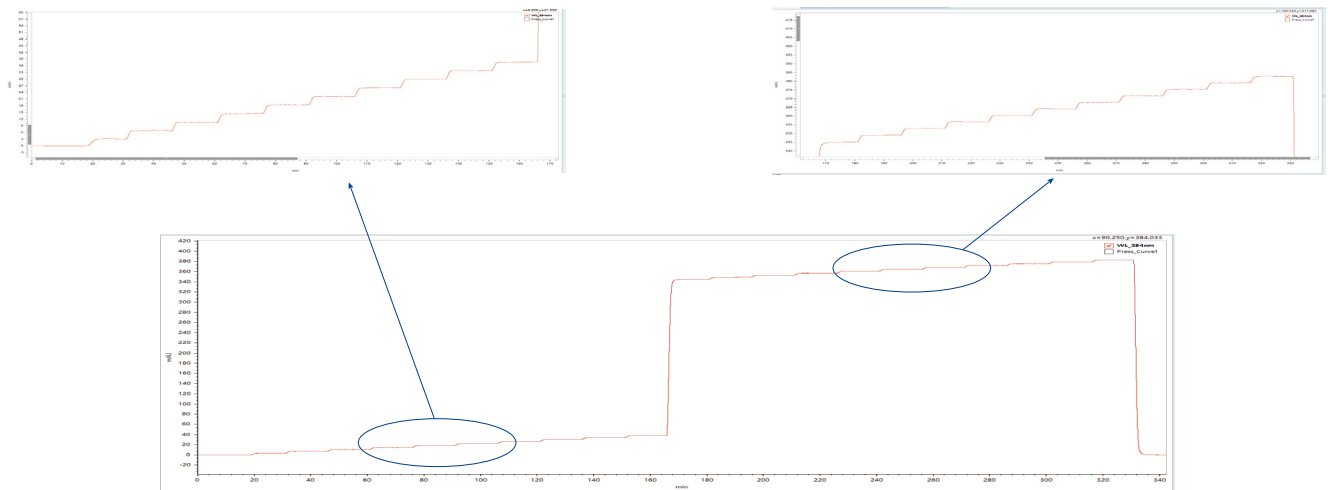
Various Mixers

Equipped with various volumes of liquid phase mixers (ranging from 50 μ L to 1600 μ L), precisely matching different delay volume requirements and flow rate demands, greatly enhancing experimental flexibility and analytical reliability.



Small Gradient Ratio

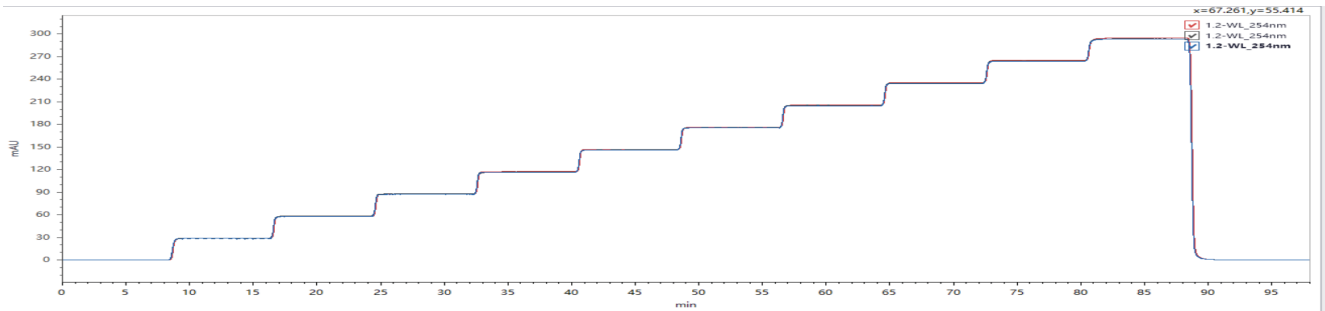
For scenarios in HPLC analysis that require stringent small gradient ratios, such as weakly retained component separation and trace impurity detection, innovative pump achieves ultimate precise control in the 1%-10% mobile phase ratio range through core technology optimization. Each 1% ratio adjustment delivers clear and stable output, completely solving the traditional pump problems of small gradient ratio drift and large fluctuations.



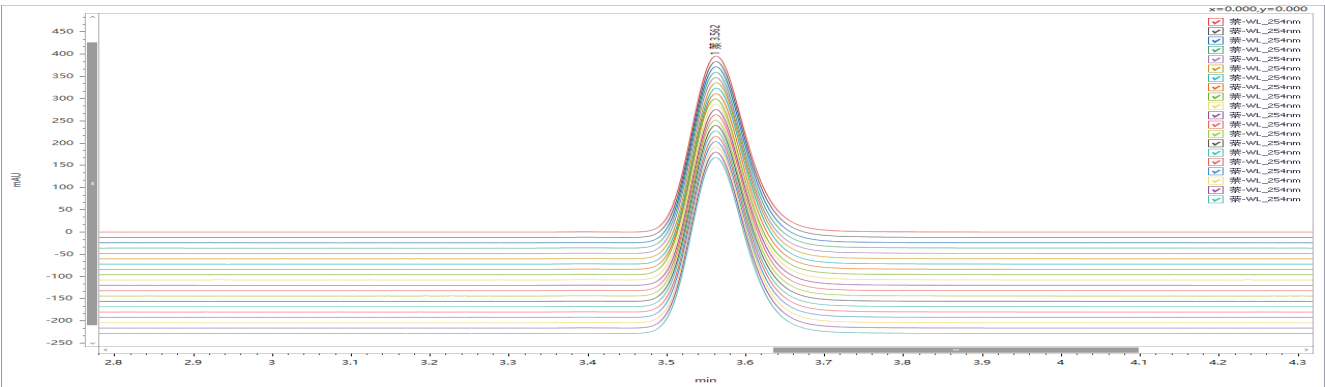
1 mL/min											
Percentage (B)%	0	1	2	3	4	5	6	7	8	9	1
	-0.1	3.033	6.859	10.536	14.556	18.428	22.246	26.134	30.052	33.806	37.702
Gradient Accuracy		-0.18%	-0.18%	-0.22%	-0.17%	-0.16%	-0.16%	-0.15%	-0.12%	-0.14%	0.13%
Percentage (B)%	90	91	92	93	94	95	96	97	98	99	100
	345.187	349.166	352.888	356.564	360.331	364.045	367.994	371.591	375.397	378.997	382.729
Gradient Accuracy	0.19%	0.23%	0.21%	0.17%	0.15%	0.12%	0.15%	0.09%	0.08%	0.03%	0.00%

Gradient Repeatability Results

Through dual precise control of flow rate and ratio, ensuring consistent gradient curves, retention times, and peak heights for each run, providing "reproducible and reliable" gradient assurance for challenging trace analysis.



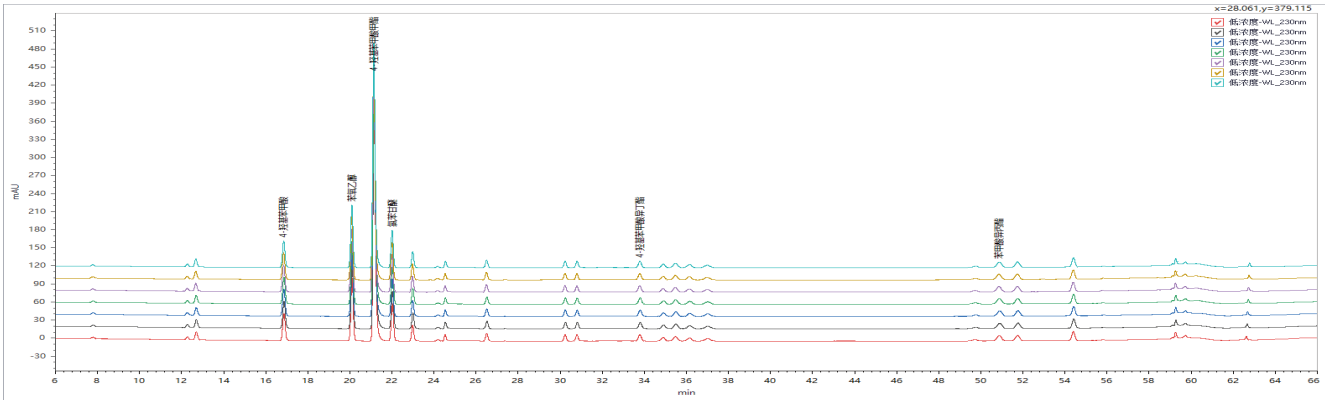
Naphthalene Test (N=20) Repeatability Test



Retention Time RSD	Retention Time SD	1	2	3	4	5	6	7	8	Up to 20
0.000	0.000	3.562	3.562	3.562	3.562	3.562	3.562	3.562	3.562	3.562

Naphthalene single standard 20 consecutive injections, single component RSD 0.000%, SD 0.000 min

23 Preservatives (N=7) Repeatability Test



Test results of 23 preservatives (Cosmetics Safety Technical Standards 2022 Edition), with 6 compounds selected as indicators for the study. Results show that retention time RSD values are all less than 0.05%, exceeding the requirements of national standard (GB 26792-2019). For retention times less than 40 minutes, SD is less than 0.01 minutes; for retention time at 51 minutes, SD value is 0.013 minutes.

	Retention Time RSD(%)	Retention Time SD(%)	1	2	3	4	5	6	7
Hydroxybenzoic Acid	0.046	0.008	16.874	16.879	16.870	16.872	16.860	16.859	16.862
Phenoxyethanol	0.038	0.008	20.120	20.125	20.117	20.120	20.107	20.105	20.110
Methyl Hydroxybenzoate	0.047	0.010	21.170	21.175	21.165	21.170	21.152	20.150	20.155
Chlorphenesin	0.043	0.009	22.042	22.049	22.037	22.043	22.025	22.025	22.030
Isobutyl Hydroxybenzoate	0.029	0.010	33.800	33.820	33.815	33.813	33.795	33.797	33.804
Isopropyl Benzoate	0.026	0.013	50.894	50.914	50.914	50.902	50.882	50.882	50.898

INTRODUCTION TO AUTOSAMPLER

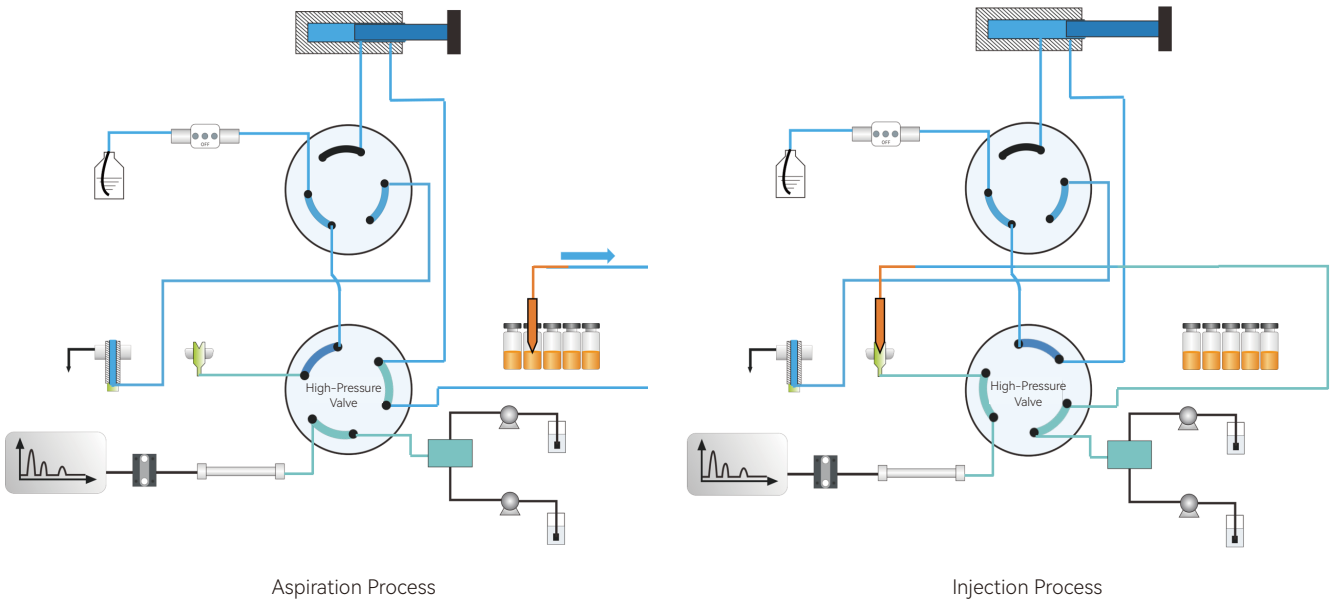
Advantages

- Flow-through needle design with metering pump injection, achieving zero sample loss during injection.
- Customizable solvent wash for needle outer wall, combined with needle inner wall rinsing, achieving extremely low cross-contamination.
- Additional diaphragm pump wash system, using three types of wash solutions to clean the injection system.
- Standard hard object needle protection function, effectively preventing injection needle damage.
- Standard lose vial detection function, avoiding invalid injections.
- Precise temperature-controlled refrigeration module, strictly controlled within 4±0.5℃.
- Injection range 0.1-50 μL, with optional 100 μL, expandable up to 1000 μL.
- Sample tray capacity of 216 vials (2 mL), compatible with 96-well plates, 384-well plates, and other sample tray types, supporting insert vial configuration.
- Supports online enrichment, online derivatization, online dilution and mixing operations.
- Enables coordinated purge between pump and autosampler, eliminating the need for tedious manual purge valve operation.



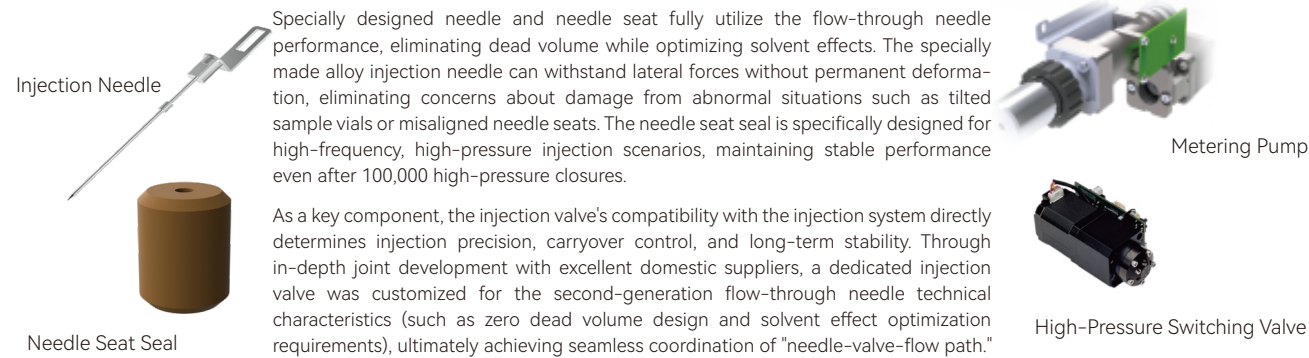
FTN (flow through needle injection system)

Self-developed second-generation flow-through needle lossless injection system. The needle body uses high-precision micro-machining technology, combined with fine step adjustment of the self-developed metering pump, achieving stable injection from 0.1 μL to full range. AS3500 offers excellent injection repeatability and accuracy, easily meeting pharmaceutical industry "content uniformity testing" and clinical "trace metabolite quantification" application scenarios. Lossless means every drop of sample can be fully utilized, avoiding experimental failure due to insufficient sample.



Metering Pump and Key Components (Needle, Needle Seat, Valve)

The continuously evolving self-developed metering pump achieves the ultimate in both wear resistance and precision, with service time far exceeding traditional syringes. Continuous breakthroughs in core details such as pump head, seal, and plunger coordination completely eliminate turbulence dead zones, ensuring smooth and unobstructed flow path delivery, making every injection as the starting point of reliable results.



Temperature Control

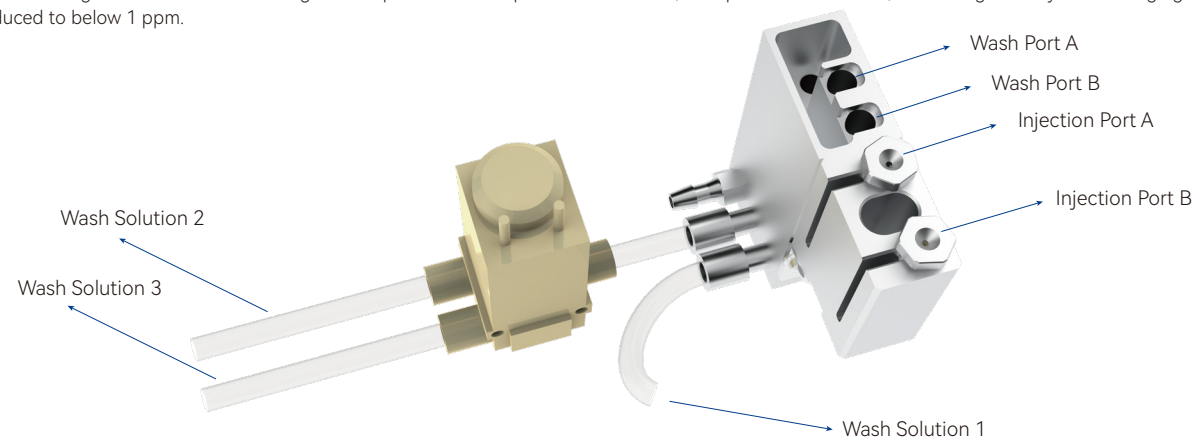
With "ultimate uniformity" and "efficient temperature control" as the core, directly addressing the customer pain point of samples being susceptible to heat-induced changes. Using "annular airflow guide + multi-point counter-flow" air duct structure, it can quickly remove condensation from sample vial surfaces while achieving rapid temperature equilibrium within the compartment through gas circulation. "Low-speed uniform rotation" is employed to enhance uniformity. While accommodating more than 200 sample vials, the space is compressed to 60% of traditional structures. Combined with PID self-tuning algorithm, sample compartment temperature can be stabilized at $4\pm0.1^{\circ}\text{C}$, with actual temperature deviation inside sample vials strictly controlled within $4\pm0.3^{\circ}\text{C}$.



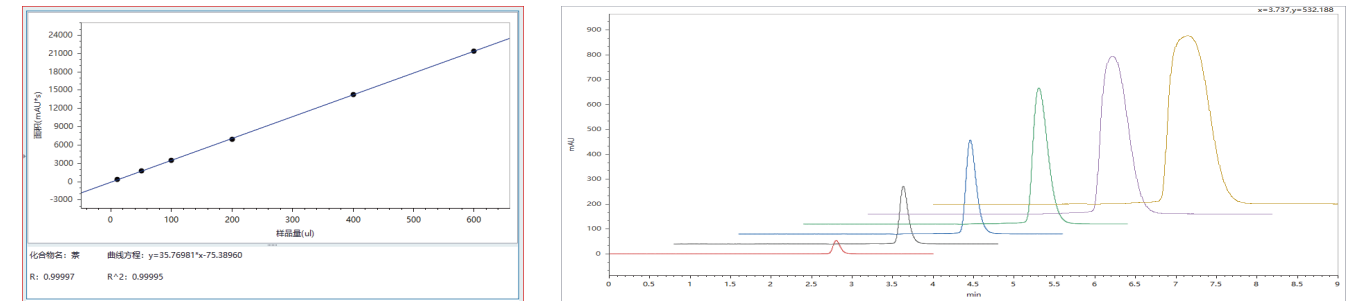
Multiple Wash Needle System

To address the pain point of cross-contamination caused by injection needle tip residue, and to ensure full scenario coverage, an exclusive design featuring three different wash solution sources (polar wash solution, non-polar wash solution, and biological enzyme cleaning agent) is employed. Combined with two dynamic methods of "flushing" and "soaking" (different flow rates, different heights), residue risks are eliminated at the source in a targeted manner, achieving "precise decontamination" for any type of sample.

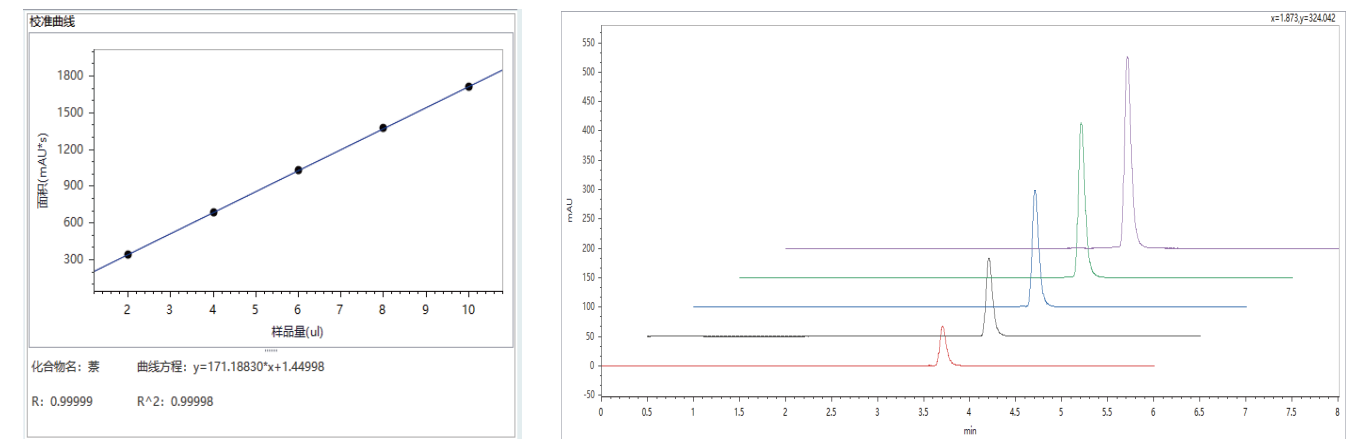
Extreme scenario enhancement: When switching from high concentration samples (e.g., $1000\text{ }\mu\text{g/mL}$ hormones) to low concentration ($0.01\text{ }\mu\text{g/mL}$), the "three-liquid alternating wash" is activated. Through the stepwise action of polar wash solution, non-polar wash solution, and biological enzyme cleaning agent, residue is reduced to below 1 ppm .



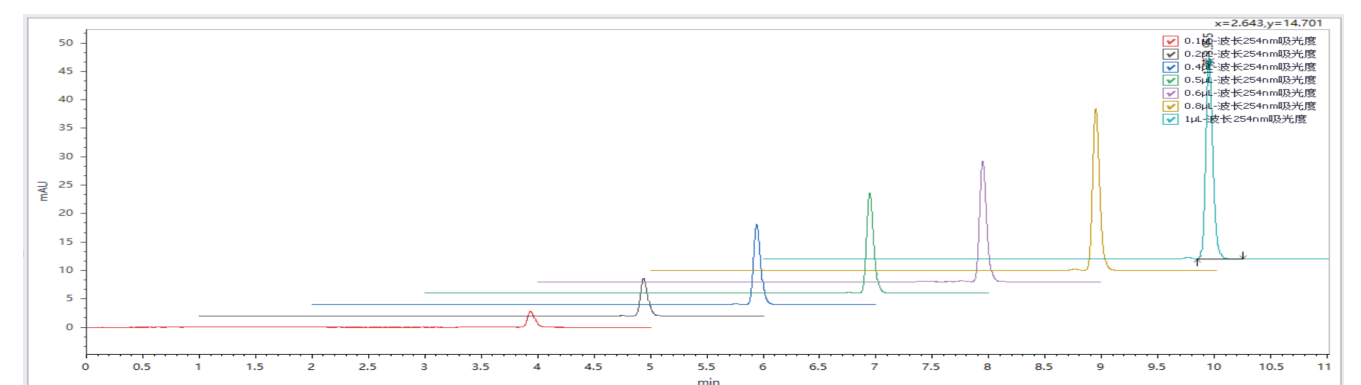
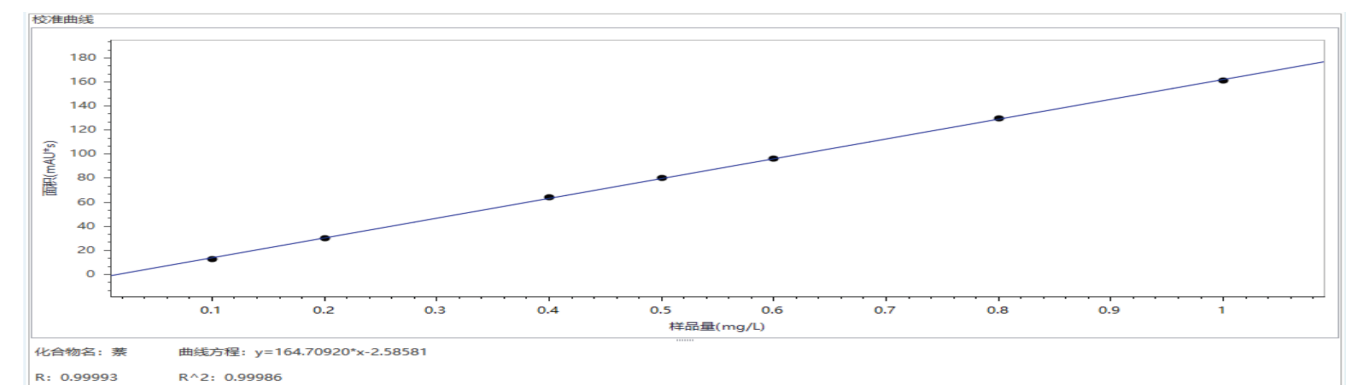
Linearity Data



R: 0.99997 (injection: 10、50、100、200、400、600 μL)



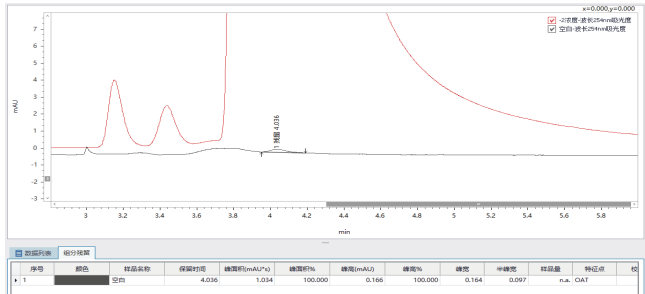
R: 0.99999 (injection: 2、4、6、8、10 μL)



R: 0.99993 (injection: 0.1、0.2、0.4、0.5、0.6、0.8、1.0 μL)

Injection Carryover Data

Example using 90% methanol-water as the single wash solution, with injection sequence of "blank → 10⁻⁴naphthalene (low concentration) → 10⁻² naphthalene (high concentration) → blank (carryover detection)." Pre-injection and post-injection dual washing is performed, ultimately reducing blank carryover to 7 ppm. Actual testing shows that with 3 types of wash solutions, under the same experimental conditions, cross-contamination can be reduced to near zero even for high-viscosity solutions, completely eliminating false positive data. Ensuring absolute data reliability from the injection source!



$$CO = \frac{Area_{\text{methanol}}}{Area_{\text{naphthalene, Conc1} \times 10^{-2} \text{ g/ml}}} = \frac{Area_{\text{methanol}}}{Area_{\text{naphthalene, Conc1} \times 10^{-4} \text{ g/ml}}} \times 100\%$$

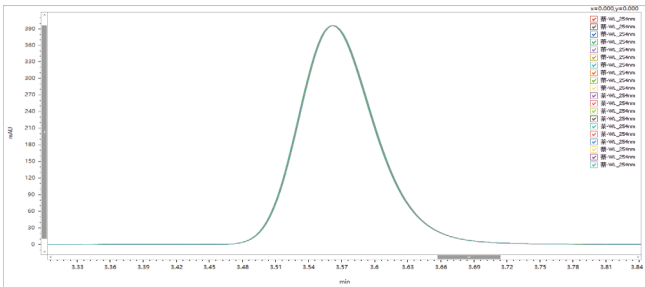
即

$$CO = \frac{1.034}{1488.354 \times 100} \times 100\% = 0.00069\%$$

Peak Area Repeatability Data (Single Standard, Mixed Standard)

The autosampler provides excellent retention time precision, peak area repeatability, and injection accuracy through flow path optimization and perfect firmware coordination.

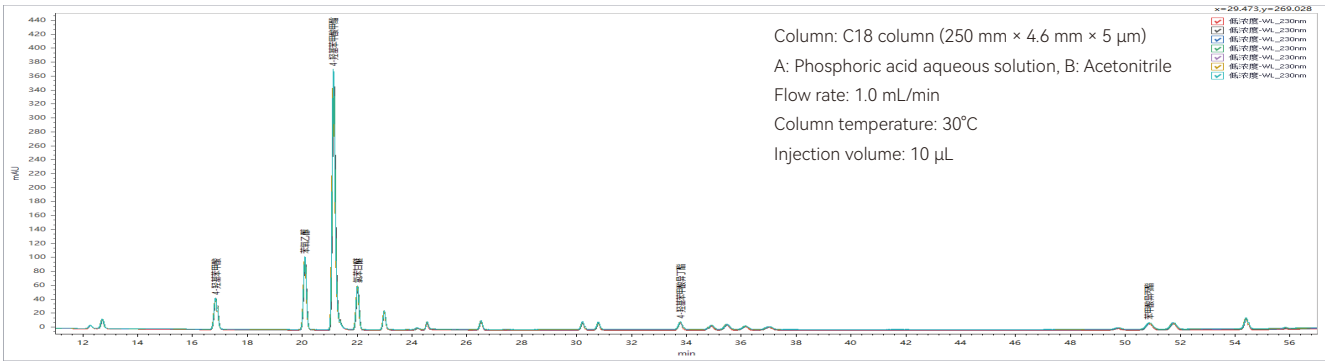
Naphthalene Test (N=20) Repeatability Test



序号	颜色	样品名称	保留时间(min)	峰面积(mAU*s)	峰面积%	峰高(mAU)	峰宽%	峰宽(min)	半峰宽(min)	峰位置	峰位置%	峰位置度
1	蓝色	空白	5.16772	1953.76847	100.000	395.908	100.000	0.128	0.075	n.a.	DAT	n.a.
2	蓝色	空白	5.16188	1953.43119	100.000	396.127	100.000	0.127	0.075	n.a.	DAT	n.a.
3	蓝色	空白	5.16172	1954.25711	100.000	396.027	100.000	0.126	0.075	n.a.	DAT	n.a.
4	蓝色	空白	5.16188	1953.00771	100.000	395.966	100.000	0.127	0.075	n.a.	DAT	n.a.
5	蓝色	空白	5.16172	1953.11023	100.000	395.876	100.000	0.127	0.075	n.a.	DAT	n.a.
6	蓝色	空白	5.16188	1953.45033	100.000	396.258	100.000	0.127	0.075	n.a.	DAT	n.a.
7	蓝色	空白	5.16188	1953.95895	100.000	396.101	100.000	0.126	0.075	n.a.	DAT	n.a.
8	蓝色	空白	5.16188	1953.14333	100.000	396.011	100.000	0.127	0.075	n.a.	DAT	n.a.
9	蓝色	空白	5.16188	1953.06032	100.000	395.896	100.000	0.127	0.075	n.a.	DAT	n.a.
10	蓝色	空白	5.16188	1953.85491	100.000	396.067	100.000	0.127	0.075	n.a.	DAT	n.a.
11	蓝色	空白	5.16172	1953.33499	100.000	395.799	100.000	0.127	0.075	n.a.	DAT	n.a.
12	蓝色	空白	5.16188	1953.32178	100.000	396.443	100.000	0.126	0.075	n.a.	DAT	n.a.
13	蓝色	空白	5.16172	1953.69488	100.000	395.633	100.000	0.127	0.075	n.a.	DAT	n.a.
14	蓝色	空白	5.16172	1952.10251	100.000	396.053	100.000	0.127	0.075	n.a.	DAT	n.a.
15	蓝色	空白	5.16188	1953.55407	100.000	395.826	100.000	0.127	0.075	n.a.	DAT	n.a.
16	蓝色	空白	5.16188	1953.32022	100.000	395.449	100.000	0.127	0.075	n.a.	DAT	n.a.
17	蓝色	空白	5.16188	1954.15223	100.000	396.022	100.000	0.127	0.075	n.a.	DAT	n.a.
18	蓝色	空白	5.16172	1954.12462	100.000	395.960	100.000	0.127	0.075	n.a.	DAT	n.a.
19	蓝色	空白	5.16188	1954.25668	100.000	396.133	100.000	0.127	0.075	n.a.	DAT	n.a.
20	蓝色	空白	5.16188	1954.17543	100.000	396.402	100.000	0.127	0.075	n.a.	DAT	n.a.
20	蓝色	空白	5.16182	1953.55415	100.000	396.044	100.000	0.127	0.075	n.a.	DAT	n.a.
20	蓝色	空白	0.00200	0.04108	0.000	0.049	0.000	0.323	0.000	n.a.	DAT	n.a.

Peak Area RSD(%)	Peak Area mAU*S									
0.041	1	2	3	4	5	6	7	8	9	10
	1953.768	1953.431	1954.257	1953.008	1953.519	1953.450	1953.959	1952.145	1955.060	1953.855
	11	12	13	14	15	16	17	18	19	20
	1952.335	1953.322	1953.686	1952.103	1953.554	1952.520	1954.325	1954.125	1954.125	1954.375

23 Preservatives (N=7) Repeatability Test



Column: C18 column (250 mm × 4.6 mm × 5 μm)
A: Phosphoric acid aqueous solution, B: Acetonitrile
Flow rate: 1.0 mL/min
Column temperature: 30°C
Injection volume: 10 μL

	Peak Area RSD(%)	1#	2#	3#	4	5	6	7
Hydroxybenzoic Acid	0.031	386.428	386.390	386.479	386.154	386.362	386.477	386.504
Phenoxyethanol	0.076	834.494	833.220	834.763	833.363	834.800	834.138	834.191
Methyl Hydroxybenzoate	0.085	3228.060	3225.229	3230.333	3222.882	3230.349	3228.664	3228.766
Chlorphenesin	0.067	493.784	493.664	493.214	492.991	493.009	493.681	493.433
Isobutyl Hydroxybenzoate	0.077	112.020	111.939	11.798	111.810	111.978	111.969	111.964
Isopropyl Benzoate	0.086	146.163	146.374	146.244	146.135	146.039	146.045	146.293

For 23 preservatives specified in the 2022 Edition of Cosmetic Safety Specifications, 6 compounds were chosen as representatives for testing; the RSD of all peak areas was < 0.1%.

INTRODUCTION TO COLUMN OVEN

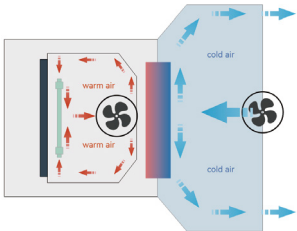
Advantages

- Standard dual-component temperature control with semiconductor cooling module and resistive heating module, achieving heating-cooling (4~120°C) full temperature range control.
- Standard dual-mode temperature control with free selection between forced air circulation and still air, maximizing method consistency requirements.
- Standard passive pre-heating module, with optional active pre-heating module.
- Standard active post-column cooling module.
- Standard chromatography column GLP information recording function, supporting simultaneous information recording for 6 columns.
- Single compartment multi-column large capacity design, single compartment supports up to 6 × 150 mm chromatography columns. Multi-compartment expansion has no usage limit.
- Standard dual leak sensors (gas sensor and liquid sensor).
- Built-in two high-pressure switching valve positions, expandable for various complex applications.
- Built-in mixer installation position.



Innovative Air Duct

Using an innovative symmetrical air duct design, achieving perfect unity of precise temperature control and efficient heat distribution. The internal constant temperature chamber adopts a unique center suction structure, where airflow is uniformly drawn in by the centrifugal fan and then smoothly discharged through symmetrical upper and lower outlets, ensuring ultimate temperature uniformity and stability within the compartment. The external heat distribution module adopts an active positive pressure blowing design, with cold air injected from the center and efficiently discharged along dual channels, greatly improving heat distribution efficiency. Internal and external circulation work in coordination to ensure high reproducibility of analytical results and reliability of long-term instrument operation.



Three-Stage Temperature Control Technology

First Stage Pre-Column Heating: Passive Protection, Active Control

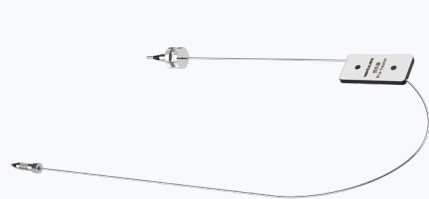


Standard passive pre-heating for basic stability protection: Through aluminum alloy high-efficiency heat conduction block (thermal conductivity coefficient above 200 W/(m·K)), pre-heating stainless steel tubing (heat exchange volume as low as 1 μL), eliminating the temperature difference between mobile phase and column.

- Sharper peak shape: Reduces peak broadening caused by temperature difference of mobile phase into the column, improving symmetry;
- More stable retention time: Avoids retention time drift caused by temperature fluctuations, especially critical for gradient analysis;
- Customizable pre-heating modes with different volumes, effectively reducing solvent effect impact.
- Customizable pre-heating tubing with different materials for special scenarios such as biocompatibility.

Optional active pre-heating, a unique component specifically designed for UHPLC: Independent resistive temperature control module (heat exchange volume less than 1 μL), real-time mobile phase temperature regulation (up to 120°C).

- Challenging high temperature/low flow rate methods: Supports micro-flow analysis with sub-2 μm small particle columns (such as 1 mm I.D. columns), ensuring sharp peak shapes even at low flow rates, reducing peak broadening;
- Compared to passive pre-heating, it can directly heat the mobile phase, further reducing heat transfer losses.
- Pre-heating temperature can be set differently from column temperature, increasing method versatility. Under special experimental conditions, such as low temperature and high salt situations where sample solubility is poor and precipitation is existing, higher temperatures can be used to ensure complete dissolution, protecting the chromatography column and avoiding blockage.

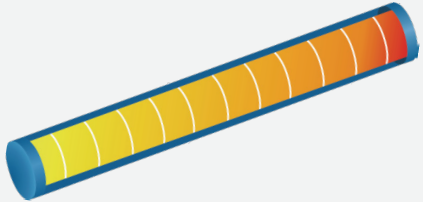
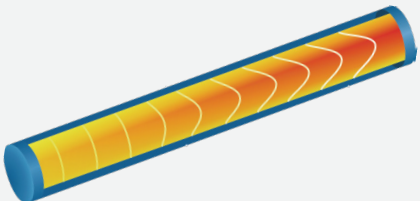
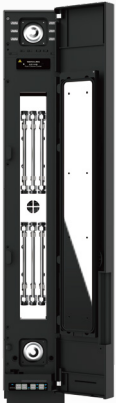
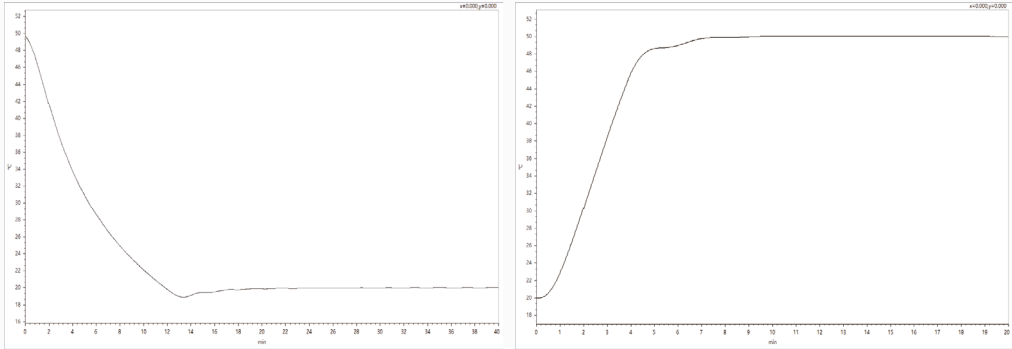


Passive Pre-Heating Module



Active Pre-Heating Module

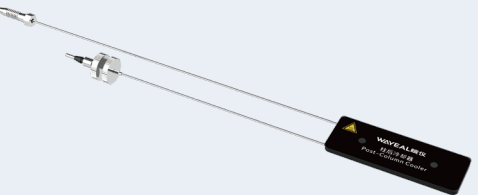
Second Stage Dual-Mode Temperature Control

	Still Air Temperature Control	Forced Air Circulation Temperature Control
Heat Transfer Mechanism	Column directly contacts heat conduction block, no airflow disturbance	Active fan-driven air circulation, forced rapid temperature uniformity in constant temperature chamber
		
	Excellent heating equilibration rate, suitable for high-throughput switching, meeting rapid seamless switching requirements for different applications (different column temperatures).	
		
	Rapidly heats from 20°C to 50°C within 7 minutes, reaching stable state at set temperature within 10 minutes; Efficiently cools from 50°C to 20°C within 14 minutes, with complete stabilization in only 22 minutes. Significantly reduces method waiting and equilibration time, substantially improving analysis efficiency and work efficiency in high-throughput laboratories.	
Advantages	- Extremely high flexibility, capable of achieving temperature-controlled separation principles of different types of column ovens, highly conforming to method consistency requirements; - To address the interference of viscosity on column temperature in ultra-high pressure systems, still air temperature control can achieve different chromatographic resolution and separation rates compared to forced air circulation temperature control, further enriching method development application requirements; - For high-throughput experiments such as method screening, forced air circulation temperature control achieves the most ideal multi-column simultaneous uniform temperature control.	

Third Stage Post-Column Cooling

Standard post-column cooling protects the final station of peak shape: Actual testing in 1 mL/min test environment shows active rapid reduction of mobile phase temperature from 120°C to 40°C.

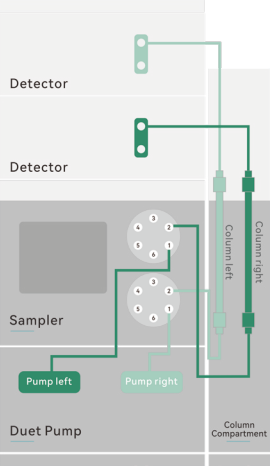
- Optimizes post-column broadening, ensuring temperature control of the path from column to flow cell, significantly reducing noise and drift in chromatographic experiments.
- Actively adjusts the temperature of column effluent, rapidly lowering high-temperature mobile phase to specified temperature. For example, when using refractive index and fluorescence detectors, optimal mobile phase temperature can be quickly reached post-column for optimal detection results.



Multi-Dimensional and High-Throughput Applications

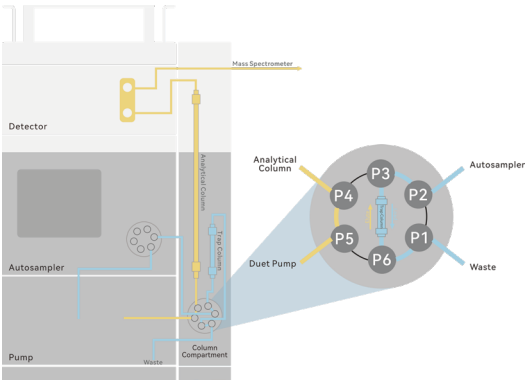
LCxLC High-Throughput Mode

The high-throughput mode relies on independent left and right pump drivers, with modular design of dual needle seats and dual high-pressure valves, enabling flexible switching to form two independent analysis systems. This configuration requires no additional hardware to achieve parallel or independent operation of two systems, directly saving the cost of one pump and autosampler configuration, significantly optimizing equipment investment while ensuring analysis efficiency.



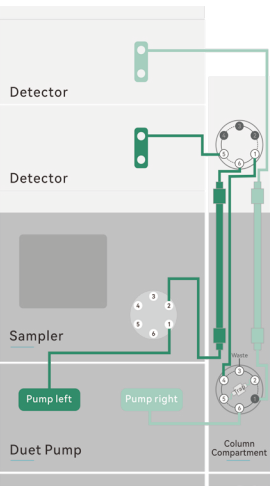
Online SPE

The enrichment pump (left pump) activates the C18 SPE column and equilibrates the column bed. After injection, large volume aqueous samples pass through the SPE column, with target compounds retained while the mobile phase removes salts and polar impurities. After 2-3 minutes, the 6-port valve switches, and the analytical pump (right pump) runs the gradient method to elute enriched target compounds to the analytical column for separation.



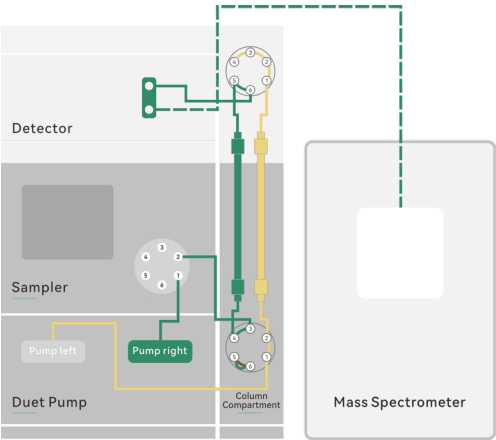
Heart-Cutting

Samples are preliminarily separated on the first-dimension column, with most separable substances displayed in the first dimension (Detector 1). After directing co-eluting components to trap columns or buffer loops, timely switching to second-dimension mobile phase elutes to the second system. The difference from online SPE is that heart-cutting uses analytical columns, while the first column in SPE is an enrichment column. The heart-cutting method can be conveniently expanded to multiple heart-cutting on this system.



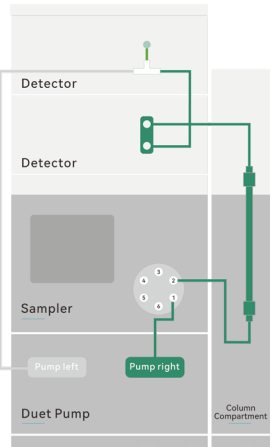
Parallel Mode

Parallel mode helps customers enrich injection expansion. Pre-column selector valves can select different chromatography columns, and post-column selector valves can select various different detectors. Each injection system is independent of the others.



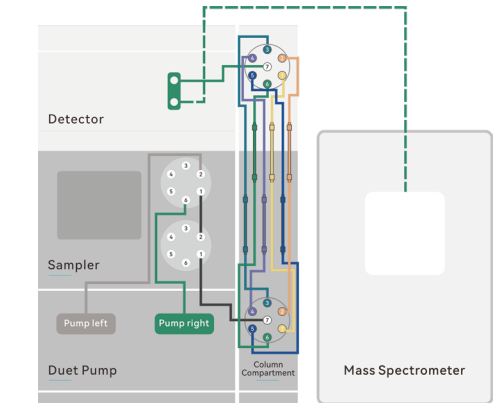
Inverse Gradient Mode

One pump executes the "analytical gradient" (target component separation) while another pump simultaneously injects a "compensation gradient" (adjusting overall mobile phase strength/composition). This outputs the varying mobile phase concentration as a constant value, reducing detector baseline fluctuation and increasing signal intensity.



Method Development

Method development is a more advanced extension of parallel applications. The column oven integrates a 6-position 7-port valve, enabling simultaneous use of 6 chromatography columns for experimental method development; combined with dual ternary pumps with independent left and right pump operation capability, method optimization with 6 mobile phases and 6 chromatography columns can be achieved.



INTRODUCTION TO DIODE ARRAY DETECTOR

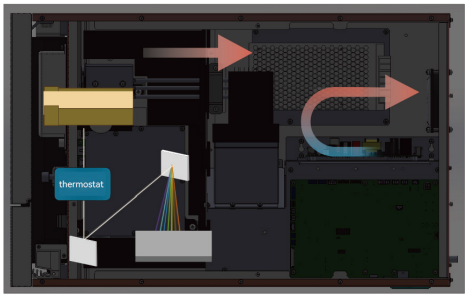
Advantages

- High resolution approach using 1024 array, combined with variable slit, improving spectral resolution to 0.6 nm/pixel.
- Dual lamp mode with deuterium and tungsten lamps, compared to single lamp systems, significantly extends lamp work time, improves visible light detection sensitivity, and provides faster scanning speed.
- Triple temperature control system with temperature-controlled lamp chamber, temperature-controlled flow cell, and temperature-controlled optical chamber isolates external influences, significantly shortening baseline stabilization time, allowing injection to begin within 30 minutes of startup.
- Selected high-quality long-time deuterium lamp with service time exceeding 10,000 hours.
- Flow cell module and lamp module feature information chips for effective lifecycle management.
- Built-in holmium oxide glass for automatic wavelength calibration;
- Built-in second-order filter to eliminate grating second-order diffraction interference.
- Lamp chamber and flow cell located on front panel for convenient maintenance and repair.
- Features standard sensitivity mode (>2.5 AU) and wide range mode (≥4 AU).
- Wide range mode achieves full concentration linear coverage in a single injection without dilution, avoiding missed impurity detection with accurate response for high concentration main components.
- High sensitivity detector with noise level as low as 4 μAU.
- Supports 10 fixed channels and 3D scanning channel, balancing efficiency and accuracy, improving detection efficiency.
- 200 Hz scanning rate provides precise three-dimensional spectra, contour plots, chromatograms, spectra, maximum value plots, and other information supporting multiple application needs, supporting advanced functions such as peak purity calculation.
- Rich flow cell options meeting high-efficiency, ultra-fast, and ultra-high efficiency scenarios with different flow rates and detection requirements.



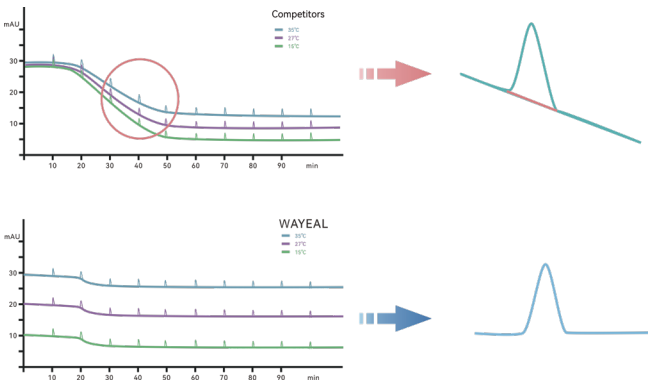
Multiple Temperature Controls

Temperature-controlled lamp chamber, temperature-controlled flow cell, and temperature-controlled optical chamber, combined with post-column cooling, form a unique 4-temperature control system, creating an exclusive thermal protection combination for post-column effluent.



Quickly Balance Baseline

The quad-temperature control DAD detector with triple temperature control system plus post-column cooling can achieve rapid baseline temperature equilibration within 30 minutes, maintaining highly consistent baseline levels under different set temperature conditions; conventional chromatography systems without this 4-temperature control design require a lengthy temperature equilibration process after startup, presenting obvious equilibration time pain points—if experiments are rushed before the system is fully equilibrated, baseline drift (or uneven baseline) phenomena during peak elution are challenging, directly causing significant negative impact on chromatographic peak area measurement repeatability.



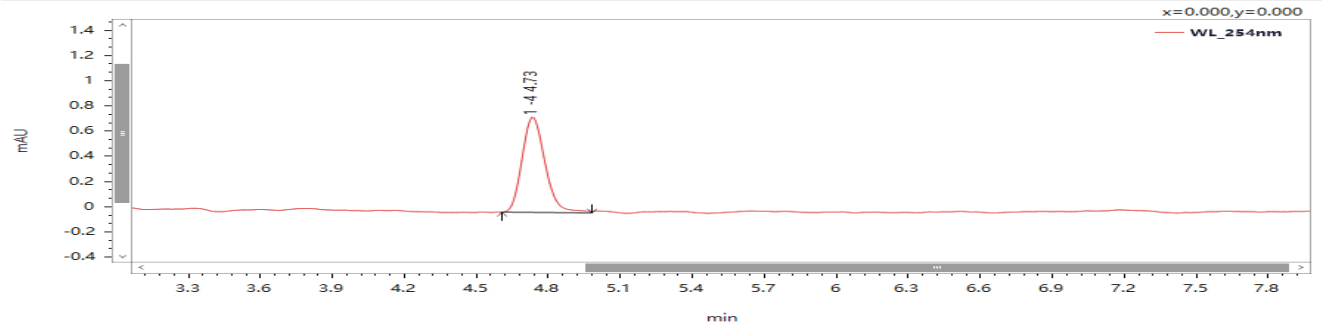
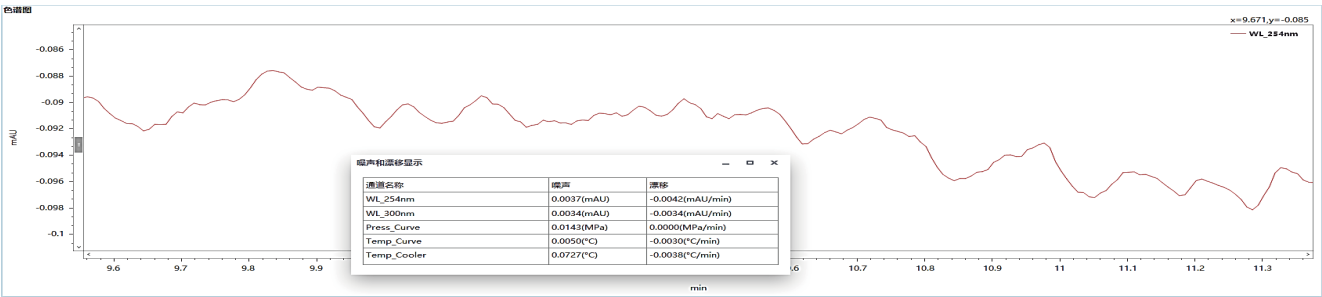
Excellent Sensitivity

Equipped with fourth-generation electronic pulsation suppression technology, combined with a well-maintained chromatography column, achieves low noise of 4 μAU. Even with long-used flow cells and columns, noise can be easily controlled below 10 μAU. This core performance not only provides extremely high sensitivity for detection, enabling precise detection of trace target compounds on one hand, and covering more low-content impurity screening requirements on the other, becoming the "eagle eye" for impurity confirmation.

$$C_L = \frac{2N_b c V}{20H} = \frac{2 \times 0.004 \times 1 \times 10^{-7} \times 20}{20 \times 0.737} = 1.08 \times 10^{-9} \text{ g/mL}$$

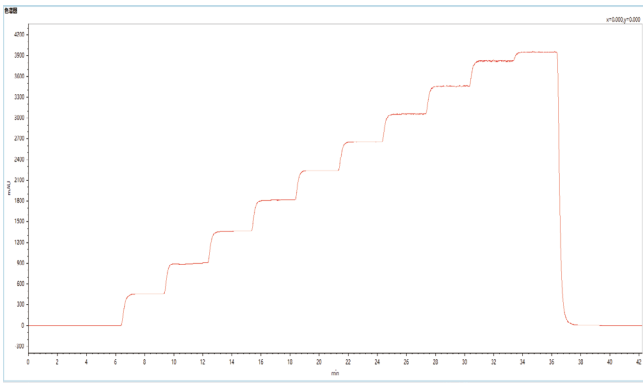
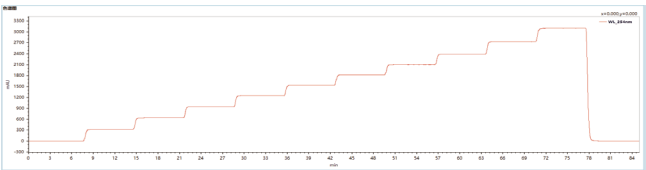
Where:

- C_L — Minimum detectable concentration, g/mL;
- N_b — Baseline noise peak height;
- c — Standard solution concentration, g/mL;
- V — Injection volume, μL;
- H — Standard substance peak height;

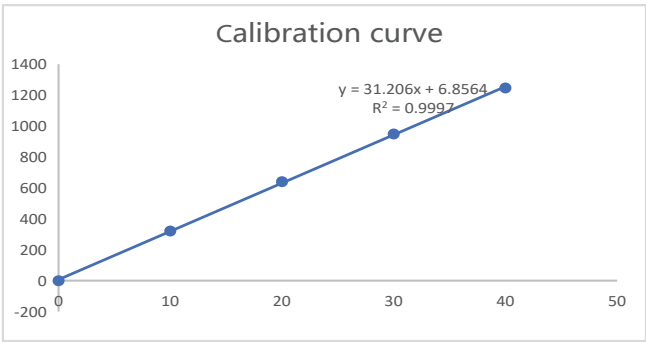


Powerful Wide Range Mode

The core pain point of pharmaceutical testing is the simultaneous detection requirement for "high concentration main components" and "low concentration impurities"—the optimized detector (4 AU linear range) ensures accurate response of main components through wide linear range (solving the "inaccurate reference baseline" problem), and enhances impurity detection and quantification through high sensitivity (solving the "difficult to capture trace impurities" problem), ultimately significantly improving the accuracy, reliability, and method adaptability of related substance analysis.



The figure shows: Theoretical response values for other concentrations calculated through the linear equation at 1200 mAU (40% content). After comparing results, the minimum deviation value at 3 AU (0.81%) is far below the 5% deviation upper limit.

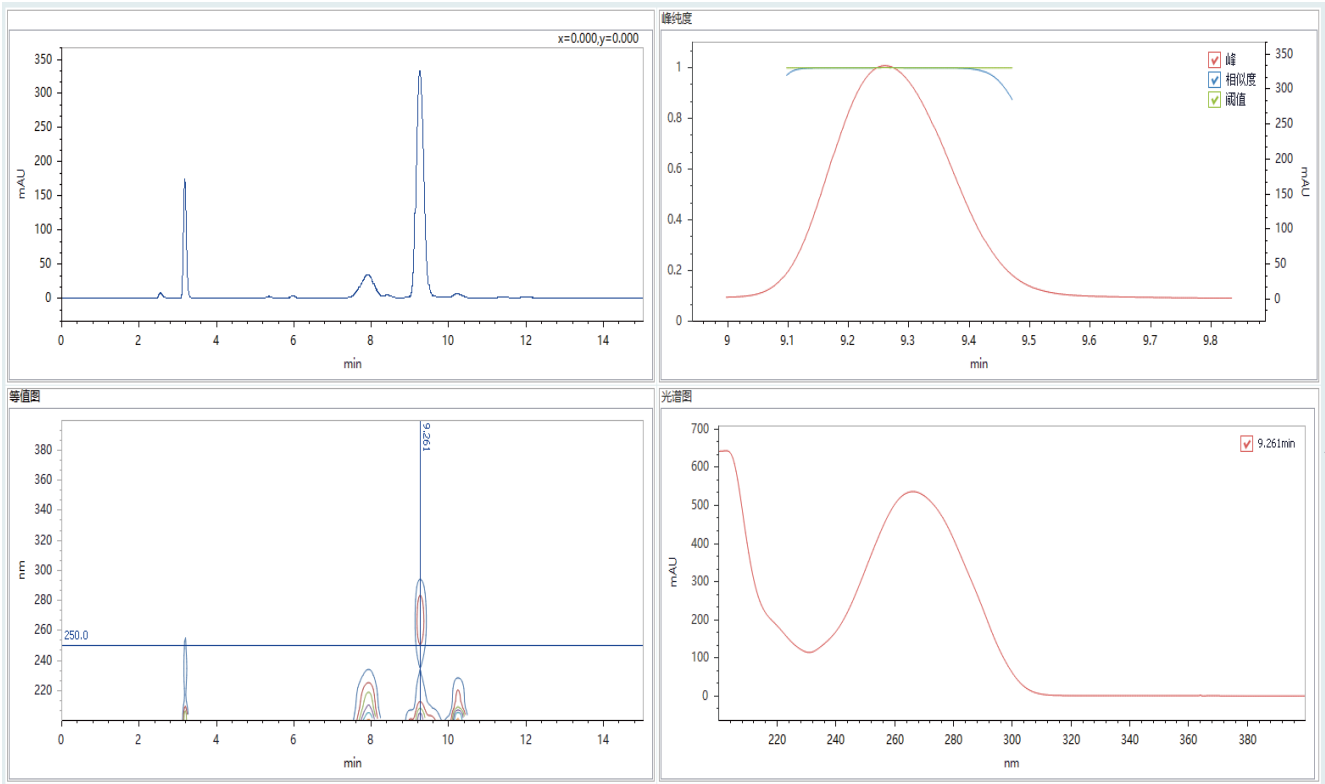
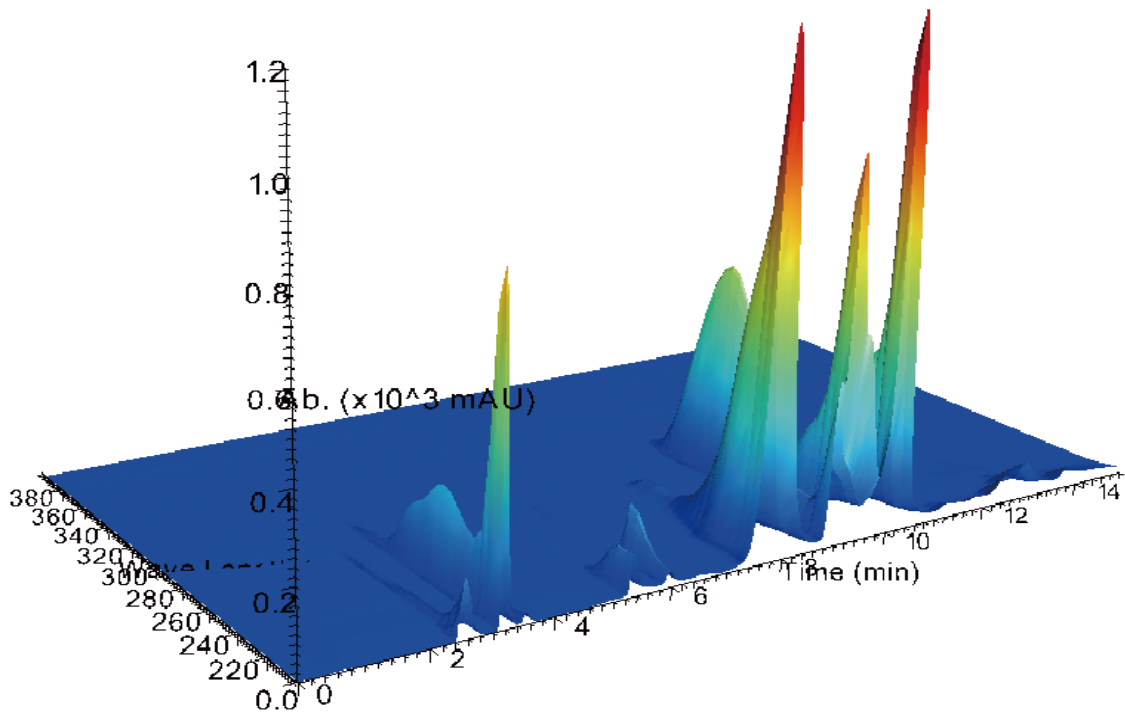


theoretical response values for other concentrations through the linear equation at 1200 mAU (40% content)

	0	10	20	30	40	50
Actual Value	-0.466	320.854	640.003	948.437	1246.031	1536.912
Theoretical Value						1567.1564
						-1.930%
	60	70	80	90	100	
Actual Value	1820.444	2100.971	2390.523	2728.36	3102.131	
Theoretical Value	1879.2164	2191.2764	2503.3364	2815.3964	3127.4564	
	-3.127%	-4.121%	-4.507%	-3.091%	-0.810%	

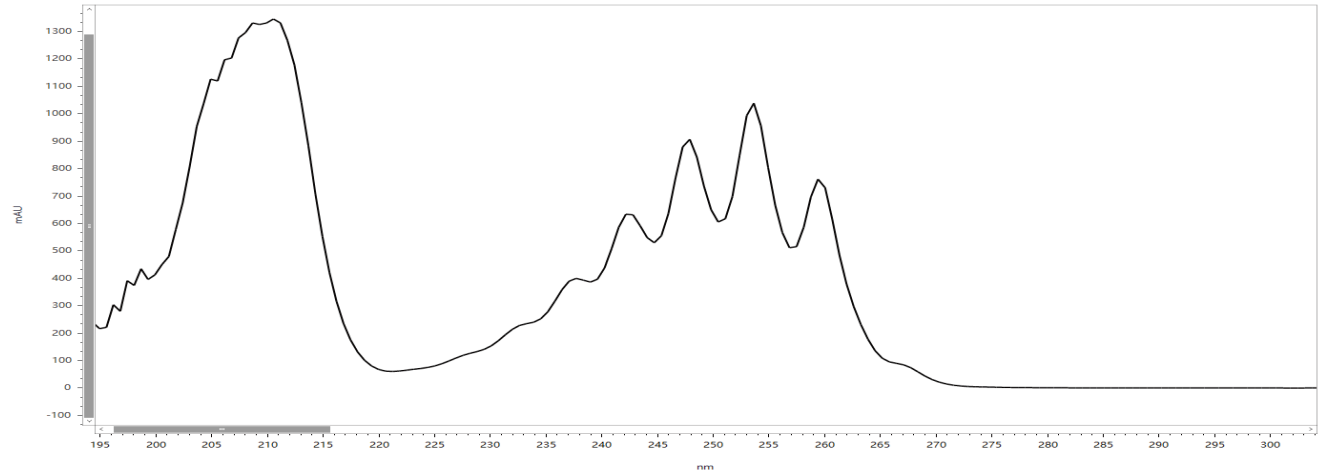
3D Spectra

The system fully unleashes the multi-dimensional detection advantages of the Diode Array Detector (DAD), combined with a high dynamic response 200 Hz scanning rate, capable of outputting not only three-dimensional spectra (time-wavelength-response value), contour plots, conventional chromatograms, and spectra, but also generating maximum value plots, providing comprehensive support for experimental design and result analysis. More importantly, the system has built-in advanced analysis functions such as peak purity calculation, which can precisely identify whether trace co-eluting components exist in chromatographic peaks, effectively avoiding qualitative errors caused by impurity interference, and providing key technical assurance for precise analysis of complex samples (such as pharmaceutical impurity analysis and environmental trace detection).



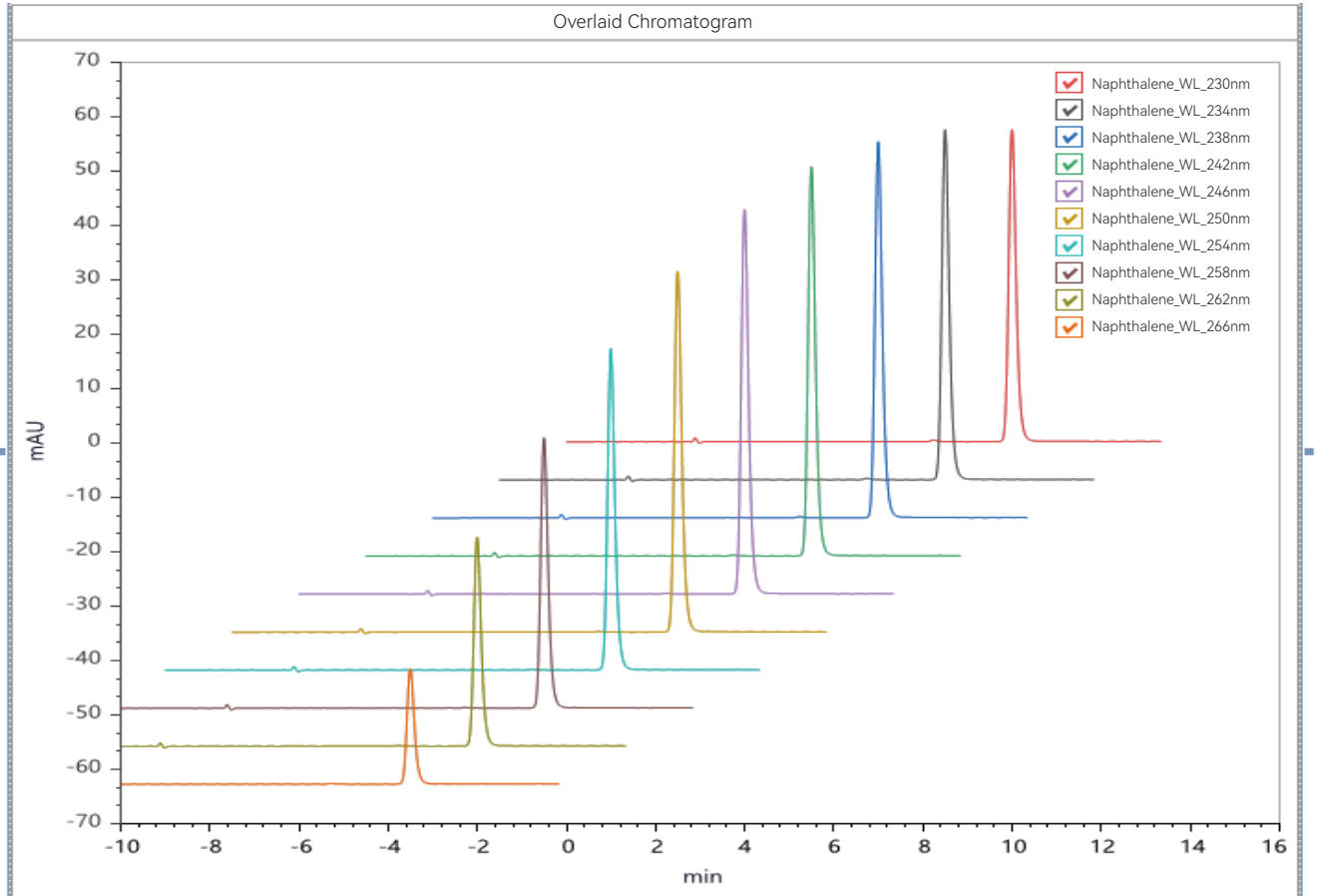
Excellent Resolution Mode

Through flexible adjustment of the variable slit, different detection scenarios can be precisely matched to lock in optimal resolution, thereby clearly capturing the unique characteristic wavelength signals of substances. As shown in the figure, when detecting benzene under 1.2 nm bandwidth conditions, the system demonstrates high-quality resolution performance—starting from 225 nm wavelength, all 8 characteristic peaks of benzene can be clearly identified with distinct peak boundaries, without signal overlap or blurring. This actual test result intuitively confirms the system's excellent resolution advantage, providing solid technical support for subsequent precise analysis of substance spectral characteristics and ensuring qualitative analysis accuracy.



Efficient and Convenient 10 Channels

The system is equipped with a 10-channel design. Compared to the mainstream 6–8 fixed channel configurations in the industry, it can efficiently accommodate multi-component simultaneous detection requirements, and can also eliminate the need for wavelength extraction, greatly accelerating customer experiment processing speed and avoiding parameter setting errors caused by frequent operations.



Full Range of Liquid Chromatography Detectors



Refractive Index Detector

1. Adopts 2-chamber design, upgraded to long-life LED light source, achieving maintenance-free operation throughout its lifecycle;
2. Can freely switch in or out of flush mode, achieving automatic flushing of the reference flow cell;
3. Adopts high-precision data acquisition system with sequential flushing, polarity, and temperature control;
4. Imported PD tube, ensuring high sensitivity;
5. Features temperature and leak alarm protection functions, enabling real-time monitoring of instrument operating status;
6. Equipped with touch LCD display, accommodating both user local control mode and chromatography software workstation mode;
7. Supports analog signal output and digital signal output, compatible with other brand chromatography systems.



UV Detector

1. Dual lamp position design, equipped with high-transmission deuterium lamp and tungsten lamp (optional), greatly enriching the detector's detection range to achieve full-range detection within 188 nm-900 nm;
2. Built-in multi-dimensional wavelength calibration function (holmium oxide calibration filter, potassium dichromate, erbium perchlorate, deuterium lamp characteristic wavelength calibration functions), achieving extremely high wavelength accuracy;
3. Features stopped-flow wavelength scanning, dual wavelength detection, and wavelength programming functions;
4. Supports ratio chromatogram analysis, assisting in extended peak purity analysis.



Fluorescence Detector

1. Dual monochromator structure, enabling flexible setting of excitation wavelength and emission wavelength, while achieving monitoring of four wavelength channels simultaneously;
2. Supports excitation spectrum scanning, emission spectrum scanning, lamp spectrum scanning, and other multi-mode scanning;
3. DC xenon lamp provides stable light source, multi-level precision detection gain settings achieve large dynamic range and high signal-to-noise ratio;
4. Equipped with touch LCD display, accommodating both user local control mode and chromatography software workstation mode;
5. Supports analog signal output and digital signal output, compatible with other brand chromatography systems.



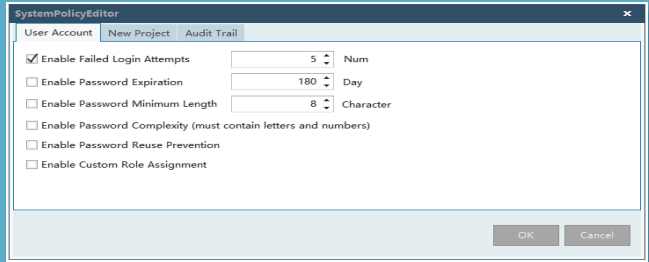
Evaporative Light Scattering Detector

1. Low-temperature evaporation design, also provides high sensitivity for thermally unstable and semi-volatile compounds;
2. Built-in gas mass flow meter, capillary heat transfer differential calorimetry for precise gas flow control, with independent airflow control for nebulization, evaporation, and detection, ensuring excellent response repeatability;
3. Drift tube adopts anti-corrosion treatment, stainless steel structure (without fragile glass or easily corroded components);
4. Imported nebulizer and photomultiplier tube, ensuring high signal sensitivity, long life, and wide adjustable range;
5. Features temperature, liquid leak, and gas leak alarm protection functions, enabling real-time monitoring of instrument operating status;
6. Equipped with touch LCD display, accommodating both user local control mode and chromatography software workstation mode;
7. Supports analog signal output and digital signal output, compatible with other brand chromatography systems.

SMARTLAB CHROMATOGRAPHY SOFTWARE

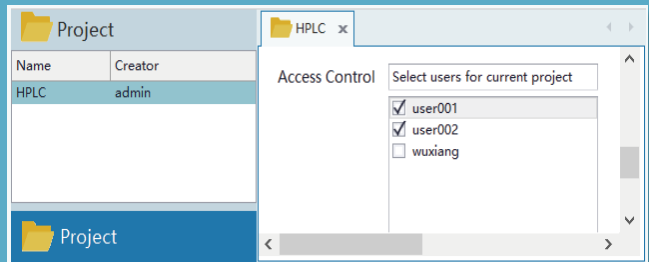
SmartLab chromatography software features simplicity, efficiency, and regulatory compliance as its main characteristics, providing convenient and comprehensive chromatography workflow and data management methods. Through four key elements—access control, audit trail, data management, and electronic signature—it fully ensures that customer laboratory data compliance meets stringent regulatory requirements.

To ensure system security and user account protection, establishing and implementing effective password policies is crucial. By setting complex passwords and regularly updating passwords to avoid reusing old passwords, the risk of account compromise can be reduced. At the same time, ensure that password policies comply with laboratory internal management requirements, industry standards, and relevant laws and regulations.



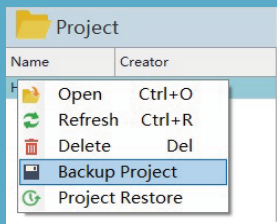
Setting User Security Policy

Users must authenticate with account and password before being allowed to access authorized data and operable instrument range, preventing violations such as leaks and invalid operations, and reducing potential data compliance risks.



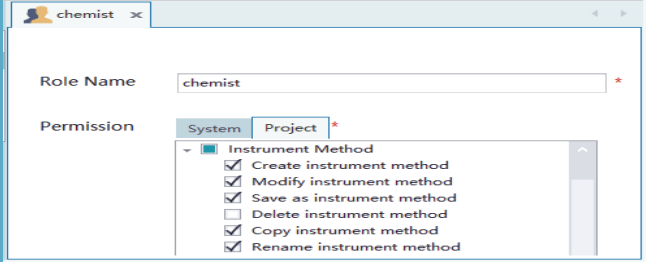
Project Access Control

Provides data export and project backup methods, or copying data to other media, preventing data loss that may be caused by hardware failure, malicious attacks, or human error. Through data backup methods, the impact of data loss on business can be minimized, ensuring rapid restoration to previous state when disasters occur. Enterprises can quickly recover business when facing data issues, ensure stable business operation, better meet regulatory requirements, and reduce legal risks, financial and reputational losses.



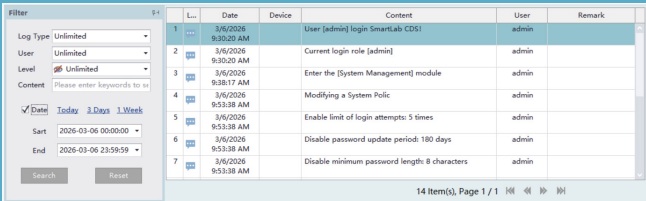
Data Backup

According to laboratory management requirements, assigning a specific set of permissions to defined roles and assigning roles to users can achieve hierarchical personnel access and control capability management needs, making management more flexible and efficient. Administrators can create different levels of roles and assign them to users, which is particularly important in managing data security of multi-user chromatography data systems and personalized user services.



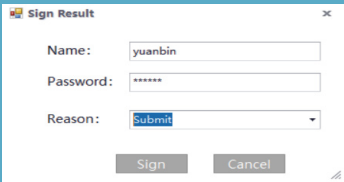
User Permission Management

Using an independent and closed audit trail function can record all operation details of users creating, editing, and deleting GXP records in the chromatography software, including operation time, executor, operation content, and results, ensuring information cannot be tampered with and is traceable, helping to reproduce historical events. Audit trail logs are automatically recorded by the system without manual intervention, providing strong assurance for data integrity.



Audit Trail Log

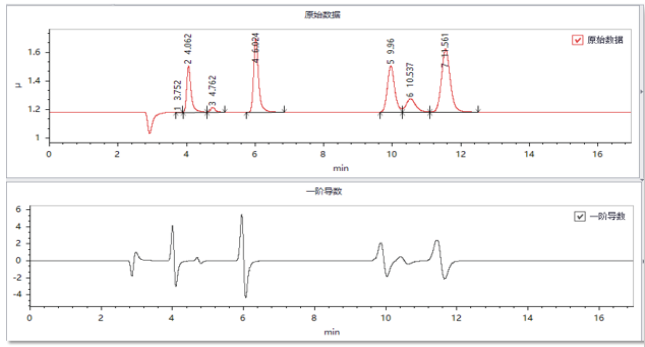
Through the use of encrypted electronic signatures, which have the same legal effect as handwritten signatures, used to prove the identity information of the electronic signer and ensure the security and authenticity of the signing process. The signer's account name, signing time, and signing meaning contained in the electronic signature are used to indicate the signer's approval of data information and can be used to trace historical records. Electronic signatures not only ensure data compliance requirements but also improve document processing efficiency, reduce the cost and time delays associated with traditional paper signatures, and are suitable for product release in continuous production processes.



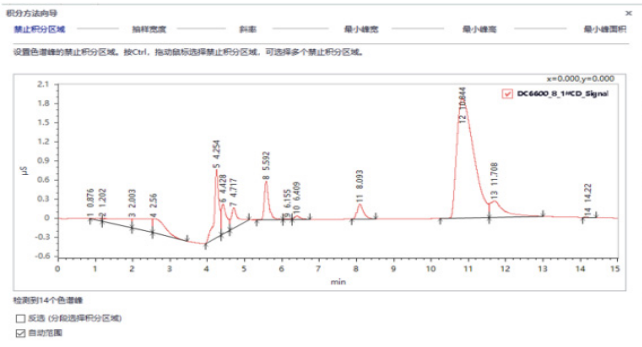
Execute Electronic Signature Confirmation

Efficient Data Processing, Flexible Results Display

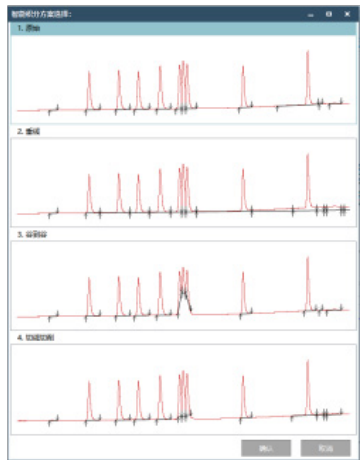
The integration wizard tool only requires chromatography workers to perform drag and click operations with the mouse in the chromatogram window to quickly complete chromatographic peak identification and integration, without the need to manually set tedious integration timetables, making chromatographic analysis work more efficient and smooth.



Newly Designed Integration Algorithm

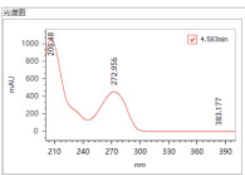


Convenient Integration Wizard Tool



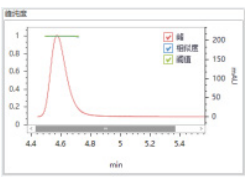
When chromatographic analysis workers face chromatographic peaks that have not achieved baseline separation and cannot be effectively processed to obtain ideal chromatographic integration results, the intelligent integration assistant can quickly assist: simply click with the mouse and select different baseline types in the drop-down menu to obtain corresponding integration results. This "what you see is what you get" mode can save analysts a significant amount of time cost for integration parameter optimization.

Intelligent Integration Assistant



View Spectrum

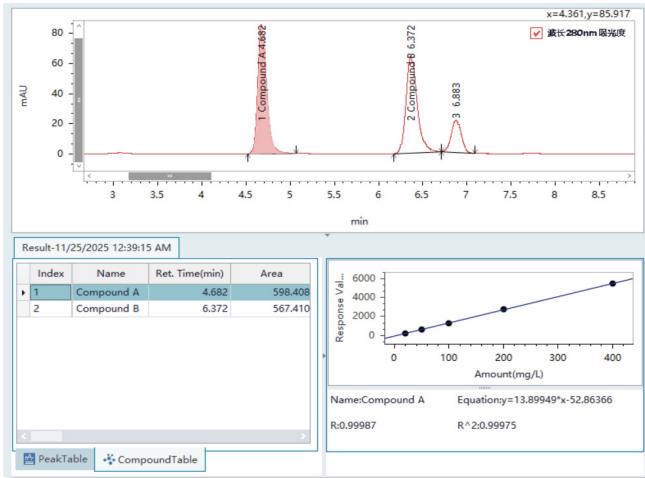
When using the Diode Array Detector (DAD), the spectrum of chromatographic peaks at any retention time point can be viewed through the scanned chromatogram-spectrum-signal intensity three-dimensional plot. Through the spectrum, the maximum absorption detection wavelength can be established, or the quality characteristic parameters of compounds can be characterized through the intensity ratios of different spectra.



Peak Purity Calculation

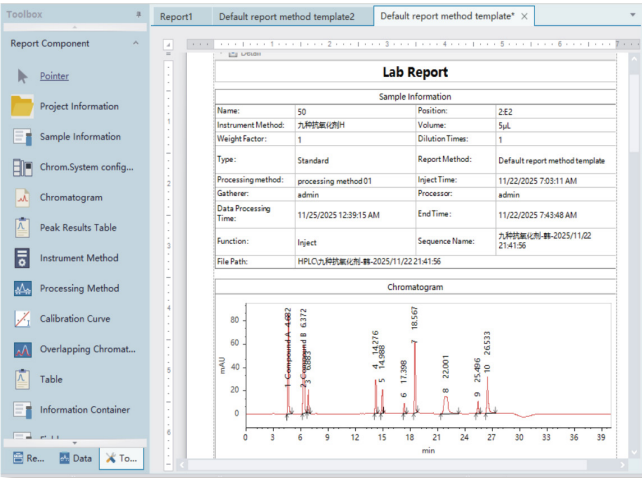
When reference standards cannot be obtained but component confirmation of chromatographic peaks is required, such as pharmaceutical impurity analysis, purity calculation using spectra can serve as the preferred supplementary solution. Combined with time window, baseline correction, and purity threshold, qualitative identification and detection of compound components can be performed quickly and accurately.

The chromatography software has a built-in relational database, and all test results are managed with relational data architecture. When viewing chromatographic data results, associated test information can be viewed in real-time, and the required result information can be customized for display through toolbar buttons.



Real-time Display of Associated Results

The report editing tool has multiple report templates and tools. Users can directly use predefined report templates to quickly output results, or customize and edit report templates according to actual needs to obtain ideal result displays. The report editor can also customize images (such as company logos), font colors, borders, and other settings, fully meeting customization needs.



Flexible Editing of Result Reports

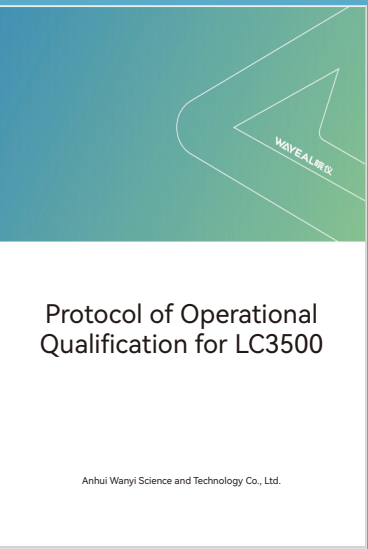
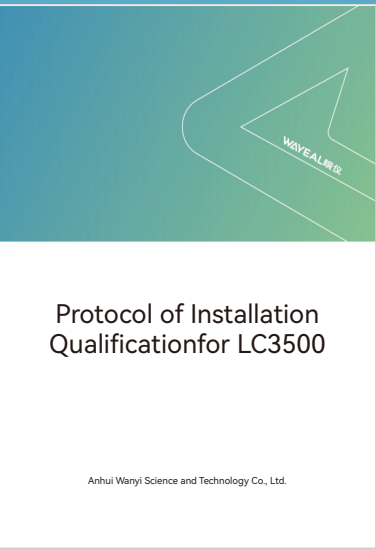
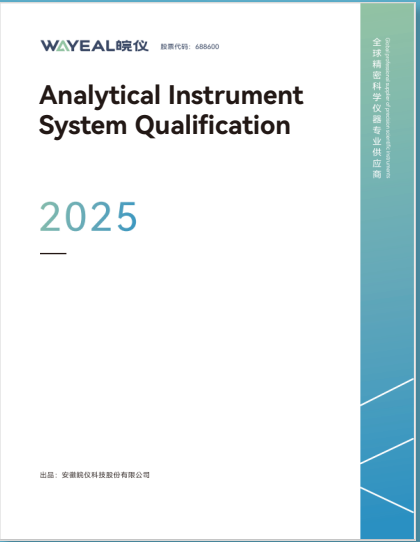


Data Compliance Product White Paper

Detailed analysis of WHO ALCOA recommended principles and FDA 21 CFR 11, EMA GMP Annex 11 regulatory requirements, enabling chemists and scientists to understand the importance of data integrity and security to data quality for analytical laboratories and enterprises, understand data compliance management and implementation measures, and ultimately understand the necessity of regulatory-compliant chromatography software in dealing with on-site inspections.

Through detailed interpretation of USP<1058> general chapters and GAMP5 guidelines, analytical laboratory personnel, enterprise validation teams, and equipment suppliers can comprehensively understand the definition and latest changes in data quality, the process and requirements of analytical system qualification, computerized system validation processes, and the relationship with analytical method lifecycle management. Validation work will be more proficient, efficient, and convenient, without worrying about challenges from regulatory agencies.

Analytical Instrument Qualification White Paper



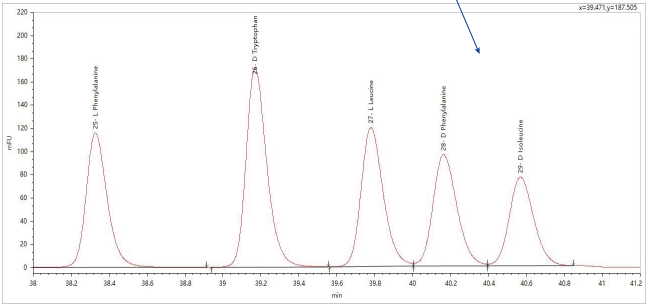
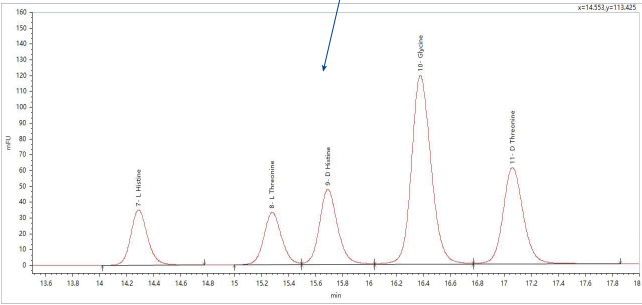
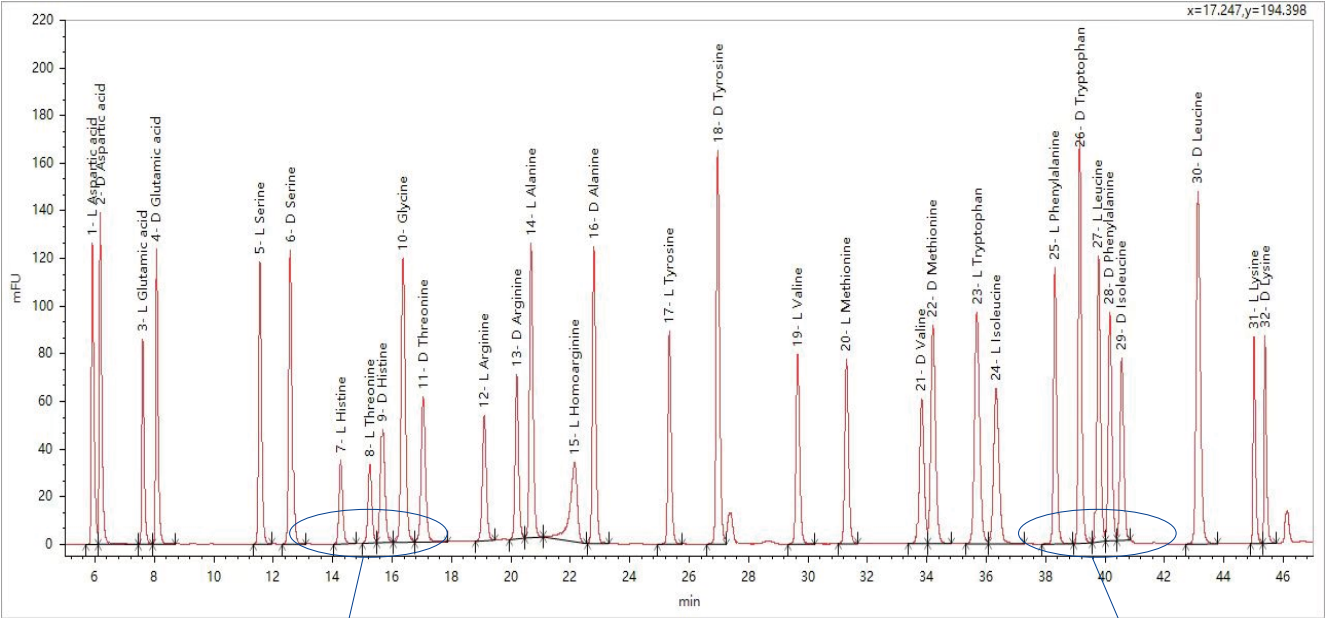
A brand-new validation protocol designed based on GxP (GMP/GLP/GCP/GDP) regulations for computerized systems and the latest requirements for qualification and validation, keeping validation work always at the forefront.

Modular document architecture design with wizard-style operation, containing detailed test methods and acceptable result evaluation criteria, making validation work more operational, more convenient, avoiding invalid data, and achieving more accurate results. All validation work is completed by qualified technical service engineers, and validation results are jointly signed and confirmed by users and engineers, ensuring the authenticity and accuracy of validation work.

Online Derivatization

Addressing the pain points of traditional offline derivatization such as "uneven reaction, poor reproducibility, and peak broadening," Wayeal online derivatization system forms effective instant reactions through laminar flow mixing, ensuring 100% completion of derivatization reactions before entering the chromatography column, avoiding peak splitting caused by incomplete reactions from the source. It enables breakthrough separation effects for difficult-to-separate substances, especially suitable for scenarios requiring derivatization analysis such as amino acids, biogenic amines, and pesticide residues.

32 Amino Acids Online Derivatization Test

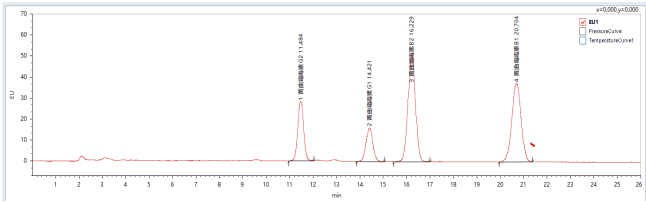


System Settings			
Flow Rate	0.7mL/min	Column Temperature	30°C
Excitation Wavelength	230nm	Emission Wavelength	450nm
Mobile Phase A	50 mM Sodium Acetate	Mobile Phase B	Acetonitrile-Methanol-Water (45-45-10)
Gradient Program	Time	A%	B%
	0	2	98
	2	2	98
	4	5	95
	12	18	82
	35	22	78
	40	28	62
	58	30	60
	66	45	55
	67	100	0
	68	2	98
	70	2	98

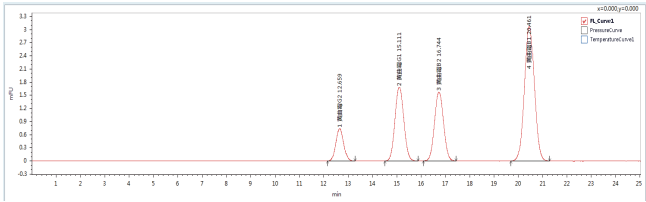
Autosampler Program		
No.#	Operation	Description
1	Position	Location: 1:A1 (Boric Acid), Needle Height: 2 mm
2	Aspirate	Volume: 2.5 µL, Speed: 40 µL/min
3	Position	Location: 1:D1 (Sample), Needle Height: 2 mm
4	Aspirate	Volume: 0.5 µL, Speed: 40 µL/min
5	Wash	Time: 3 s
6	Mix	Volume: 3 µL, Speed: 1000 µL/min, Time: 10 s
7	Wait	Time: 30 s
8	Position	Location: 1:B1 (Derivatization Reagent), Needle Height: 2 mm
9	Aspirate	Volume: 0.25 µL, Speed: 100 µL/min
10	Mix	Volume: 3.25 µL, Speed: 1000 µL/min, Time: 20 s
11	Wait	Time: 30 s
12	Position	Location: 1:C1 (0.1% Acetic Acid), Needle Height: 2 mm
13	Aspirate	Volume: 15 µL, Speed: 40 µL/min
14	Mix	Volume: 20 µL, Speed: 1000 µL/min, Time: 10 s
15	Wait	Time: 6 s
16	Inject	

Applications

Aflatoxin Detection

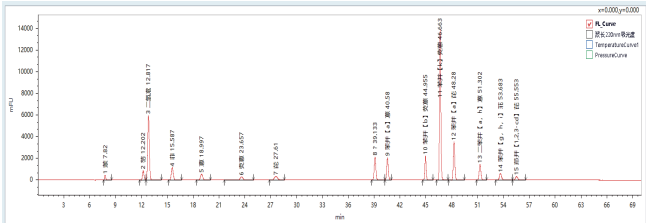


Aflatoxins-Fluorescence-Post-column Photochemical Derivatization



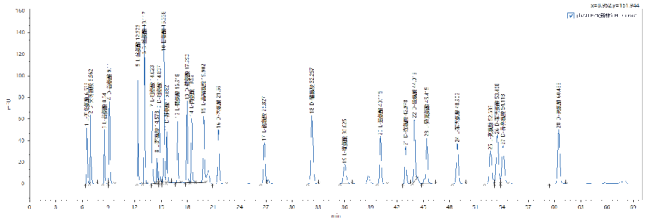
Aflatoxins-Fluorescence-Post-column Iodine Derivatization

Polycyclic Aromatic Hydrocarbons Application Detection



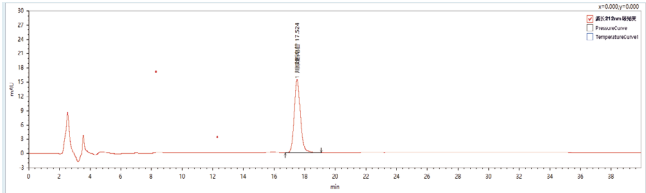
Polycyclic Aromatic Hydrocarbons-Fluorescence

Amino Acids Application Detection

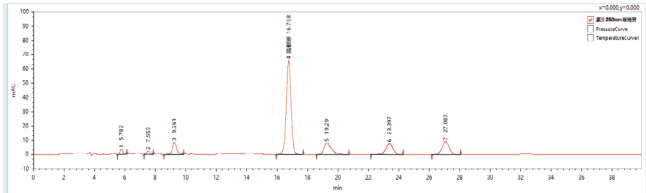


28 Chiral Amino Acids Online Derivatization

UV Detector Application Chromatograms

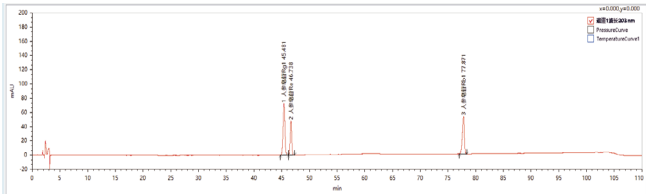


Asperosaponin Detection



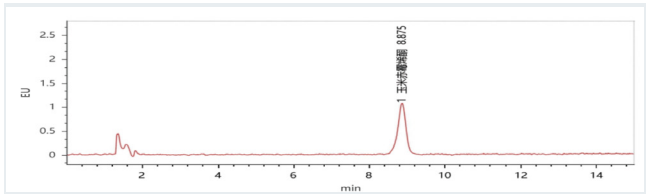
Puerarin Detection

Diode Array Detector Application Chromatograms



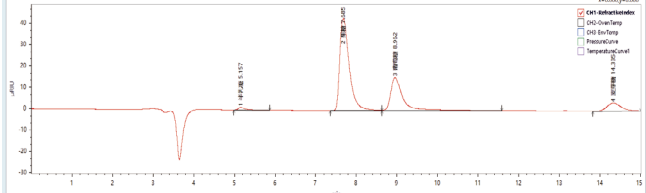
Ginsenosides Detection

Fluorescence Detector Application Chromatograms



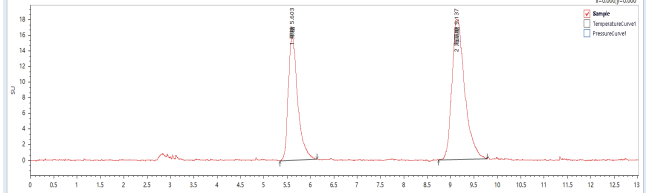
Zearalenone Detection

Refractive Index Detector Application Chromatograms



Polysaccharide Detection

Evaporative Light Scattering Detector Application Chromatograms



Fructose Detection

EFFICIENT MANUFACTURING RELIABLE AND LEADING

Precision Machining Empowerment

The company uses precision machining to facilitate in-house manufacturing of key components. Through high-precision, high-efficiency in-house component manufacturing, it meets the high precision and high reliability requirements of high-end instruments, reduces manufacturing costs, and enhances product competitiveness. During the reporting period, the company's precision machining workshop had more than 30 employees, of which 90% are mid-to-senior level technical personnel, and 28 have more than ten years of experience. The workshop is equipped with more than 20 CNC equipment, capable of achieving high-precision machining of complex curved surfaces, grooves, drilling, etc., with machining accuracy reaching 0.005 mm.

18,000 Square Meters
Workshop Area



Precision Five-Axis
Machining Center

Precision Machining
Workshop



Dust-free Electronic
Clean Room



Universal Turning
Center

Precision Machining Production and Manufacturing Scene

Quality Management System

The company strictly complies with relevant laws, regulations, and standard requirements. Based on the ISO9001:2015 quality management system, it has established business processes and operational standards around various management and technical requirements, and has now constructed a full-process quality management system covering R&D quality, supply chain quality, manufacturing quality, and customer quality. It has passed ISO9001 quality management system, ISO10012 measurement management system, and ISO13485 medical device quality management system certifications, maintaining effective operation of the quality management system through training, internal audits, management reviews, data analysis, corrective and preventive measures.



ISO9001 System Certification Certificate



ISO13485 System Certification Certificate



ISO10012 System Certification Certificate

TIMELY AND HIGH-QUALITY GLOBAL SERVICE

WAYEAL adheres to the philosophy of "providing attentive service to users" and the purpose of "timely, thorough, and efficient" service. It strengthens pre-sales, in-sales, and post-sales services, promptly helping users solve various problems encountered during the use of products provided by company, comprehensively improving the service system, ensuring service quality, and improving customer satisfaction.

We make the following commitments to user post-sales service:

- All goods must comply with national standards and the factory standards of the product.
- The warranty period for the complete machine is one year.
- During the warranty period, if the equipment fails, we provide free service.
- After the warranty period expires, if the equipment fails, we provide repair services, and spare parts are supplied at preferential prices.
- After equipment arrival, we can provide technical engineers to go to user-designated locations (domestic) for installation, commissioning, and training according to user needs.
- After users report repairs, phone response within 15 minutes. Arrive at the repair site within 24 hours.

Post-sales Network Distribution Map

The company's post-sales network covers the whole country, and regional engineers responsible for post-sales provide customers with high-quality, timely, and satisfactory products and services.

Three-tier Service Team Ensuring Service Personnel Professionalism



OVERSEAS BUSINESS LAYOUT



As a global professional supplier of precision scientific instruments operating with an international vision and according to international standards, WAYEAL is accelerating its "going overseas" strategy, actively exploring overseas markets, and committed to providing high-quality products and services to global customers. As of the end of the reporting period, the company's products are sold to more than 20 countries and regions worldwide, including Thailand, Egypt, Peru, Mexico, Kazakhstan, Brazil, Argentina, Chile, Indonesia, India, Vietnam, Bangladesh, Madagascar, etc. The company's products and services have been widely recognized by international customers.

