

Analytical Chemistry Services

Discovery Analytical Services at WuXi AppTec provides analytical and separation services to support chemistry and drug discovery.

Chiral Separation Services

- Quick development of fast assays to evaluate synthetic routes and determine e.e for chiral compound
- Fast access to pure/enantiopure intermediates or drug candidates with minimal development time and labor

High-throughput Purification Services

- MS and UV triggered automatic Prep HPLC
- Standard LC-UV-ELSD-MS platform for QC of isolated compound
- Capability to purify and characterize 500,000 compounds annually

Natural Product Purification

- Analytical reference standard isolation and characterization
- Milligram-to-kilogram natural product purification capability
- Isolation process development

High-throughput Physical Property Determination

- Thermodynamic and kinetic solubility by LC-CLND method
- Log P/log D determination utilizing shake-flask method
- Pka determination by potentialmetric titration method

Isolation and Structure Elucidation for Impurities

- Isolation of related substance by various methods including HPLC, SPE, SFC, etc.
- Elucidate structure by the combination of various analytical techniques, including NMR, LC-TOF MS, EA, IR, etc
- 1D spectra of ¹H, ¹³C, ¹⁹F, ³¹P, ¹¹B, ¹⁵N
- 2D COSY, TOCSY, HSQC, HMBC, NOESY, and HOESY
- Q-NMR Method to determine potency factor

WuXi AppTec is a global leader in providing discovery, testing and manufacturing services for the pharmaceutical, biotechnology and medical device industries. Research-driven and customer-focused, with operations in China and the U.S., WuXi AppTec offers a broad and integrated portfolio of services designed to assist our customers with cost-effective and efficient outsourcing solutions.

WX
LISTED
NYSE



For more information on WuXi AppTec's services please contact:

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Chiral Separation Services

Our Philosophies

- High quality
- Fast turn-around time
- Cost effective
- Flexibility



We Offer

- Chiral separation method development
- Chiral separation at preparative scale
- Chiral separation at production scale

Capabilities

- 3 sets Preparative SFC with 5cm AD, OD, AS, OJ and IC columns
- 3 sets Semi-preparative SFC with 2cm and 3cm AD, OD, AS, OJ and IC columns
- 5 sets Analytical SFC, including 1 with MS analyzer, with a wide collection of chiral columns
- 2 sets Preparative HPLC, with 10cm columns and packing station, bulk CSP available

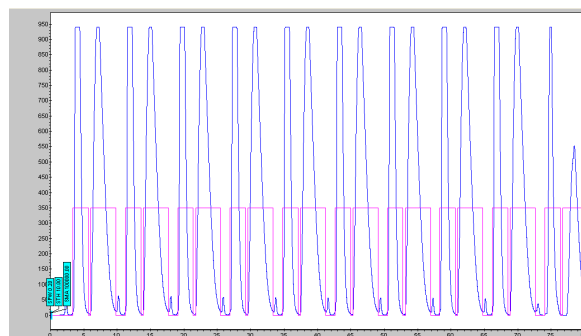
Highlight of SFC Technology

- Speed: Higher flow rate for faster separation
- Resolution: Faster mass transfer between CSP and the supercritical fluid for superior resolution
- Productivity: Stacked injection enabling high-throughput
- Cost reduction: Less solvent consumption for shorter post-separation process
- Green technology: CO₂ as major eluent tally with environmental protection



Success Cases

- Case 1- one batch separation:
 - 30kg chiral separation completed in 1.5month, including method development and optimization
- Case 2- Multi-batches separation:
 - Scheduled chiral separation on weekly base
 - 2-10 compounds per batch, from mg to hundred grams each
 - Method development, optimization, chiral separation, concentration, QC and packaging included
 - Pure enantiomers obtained in 5 working days



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