



AGROCHEMICAL SERVICES



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Alliance Pharma provides residue analytical services of pesticides, herbicides, and fungicides in a variety of matrices. We are capable of developing new analytical methods or independently validating transferred methods. We provide high-throughput screening of compounds and perform all testing in compliance with US EPA and EU regulations.

Our experience includes the following:

GLP Studies

- Independent laboratory validation (ILV)
- Drug, pesticide, herbicide, and fungicide residue analyses in environmental matrices such as soil, water, fruit, dairy products, nuts, straw, hay, clothing, plants, and animal tissues
- Dose formulation analysis

R&D Studies

- Method development, transfer, and optimization for agrochemicals in various matrices
- Environmental Fate (E-Fate) studies
- Dissipation and degradation of agrochemicals in soil
- Soil adsorption-desorption / mobility
- Aqueous solubility test
- Metabolite identification
- Long-term storage stability

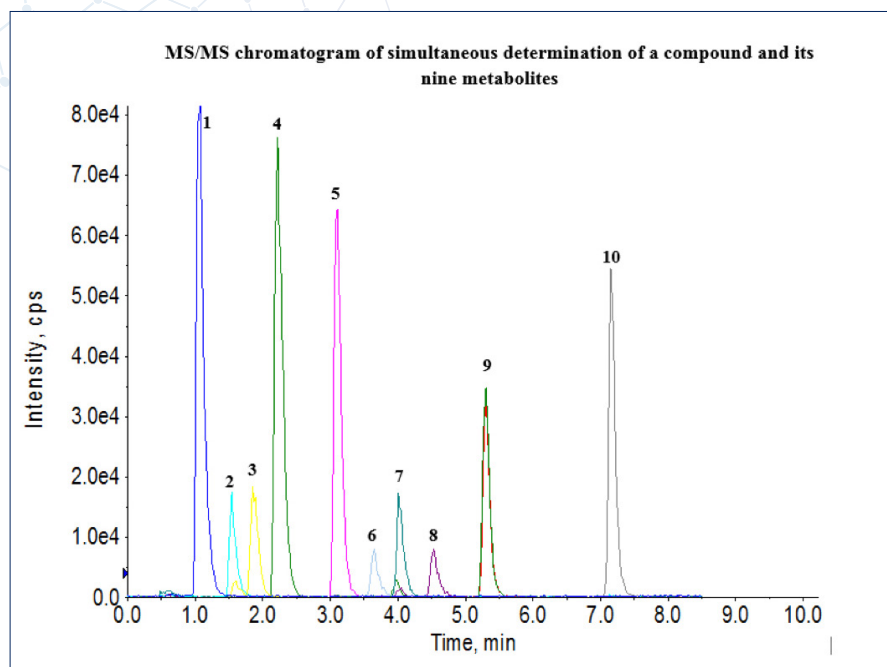
Technology Platforms

- Liquid Chromatography
 - Shimadzu HPLC/UHPLC systems with UV, photodiode array (PDA), and fluorescence detection (FLD)
 - Agilent 1290 Infinity II UHPLC with PDA and FLD
 - Dionex UltiMate 3000 RSLCnano with UV
 - Chiral HPLC analysis, Hydrophilic interaction liquid chromatography (HILIC), Size-exclusion chromatography (SEC), Ion-exchange chromatography (IEX)
- Mass spectrometers
 - SCIEX API 4000™, 5500, 6500, and 4000 QTRAP
 - Thermo Scientific™ Q Exactive™ Plus and Orbitrap™ (XL)
 - Agilent 6545XT AdvancedBio LC/Q-TOF
 - Agilent 8900 Triple Quadrupole ICP-MS
- High-throughput sample processing and sample homogenization
- Large capacity for sample storage (ambient to -80°C and -20°C walk-in freezers)





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Example: LC-MS/MS chromatogram of simultaneous determination of a compound and its nine metabolites

(Assay Validated in Corn Forage, Corn Grain, Canola Seed, Strawberries, and Dry Beans. Sample homogenization: Small volumes range from 2 to 50 mL; Large volumes up to 40 lb for coarse chopping, 53 lb for emulsion, and 20 lb for grinding.)

