CDDI Focus on Technology: Preparative LC/MS with Automated Fraction Collection

**System:** Agilent 6120 Single Quadrupole Mass Spectrometer with 1260 HPLC-Fraction Collector

In drug discovery workflow and for compound library generation, small molecules must be purified before structures, activities and pharmacological properties can be determined. Liquid chromatography is ideal for separation of compounds from biological sources and synthetic reactions, and serves as a fractionation tool in library screening. Our fully automated Agilent LC/MS system provides on-line UV (DAD) and low resolution ESI-MS (+/-) detection which enables mass-targeted fraction collection (capacity to 60 x 40 mL collection tubes).

**Sample application**

- System software controls sample injection, separation and collection (select retention time or mass), while minimizing user time.

- Analytical to preparative level separations (mg to gram scale) for reverse-phase conditions using our currently available columns (Phenomenex semi-prep RP, 10 x 250 mm, 5um; Waters PrepLC 25 mm radial compression module with 25 x 100 mm RP column segments (up to 3)).

![Image of Agilent 6120 LC/MS system](image_url)

**Figure:** Agilent 6120 LC/MS (left) and chromatogram (right) of compounds isolated (highlighted in blue) by mass-based collection.

**Selected References**


**For more information on instrument specification and availability, please contact:**

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