

## SIMPLIFY YOUR COMPREHENSIVE SCREENING OF VETERINARY DRUGS

### Agilent Veterinary Drug LC/MS Personal Compound Database and Library

Triple quadrupole LC/MS methods are considered the “gold standard” for multiclass veterinary drug analysis of meat or other foods. These methods are ideal for a pre-defined set of target compounds.

Accurate mass high resolution time-of-flight (TOF) mass spectrometers enable you to analyze *both* targets and unknowns. Their full-spectrum data acquisition ensures that signals from *all* ionizing compounds in your sample will be captured.

#### Confidently use accurate mass to perform target and suspect screening

You can screen for more than 2,100 veterinary drugs when you combine TOF or Q-TOF LC/MS with the Agilent Veterinary Drug Personal Compound Database and Library (PCDL).

This comprehensive PCDL includes accurate mass MS/MS spectra for more than 1,500 compounds, and can expand to accommodate new compounds of emerging concern. In addition, surveillance using LC/Q-TOF allows you to re-analyze or mine your data at any time—without reruns—to investigate samples further.

#### The following components are included in the Agilent Veterinary Drug PCDL— saving you time and maximizing performance

- Curated accurate-mass database with more than 2,100 compounds
- Accurate-mass MS/MS spectra for more than 1,500 compounds—over 5,200 spectra total
- Searchable user notes containing compound class and regulation tags
- Retention time information added to more than 120 compounds
- Quick-start guide with data examples and familiarization exercises
- Method Setup Guide that shows you how to create acquisition methods
- Application note with detailed LC/MS method information
- Latest version of PCDL Manager Software
- Free database upgrades for 3 years



**Agilent Technologies**

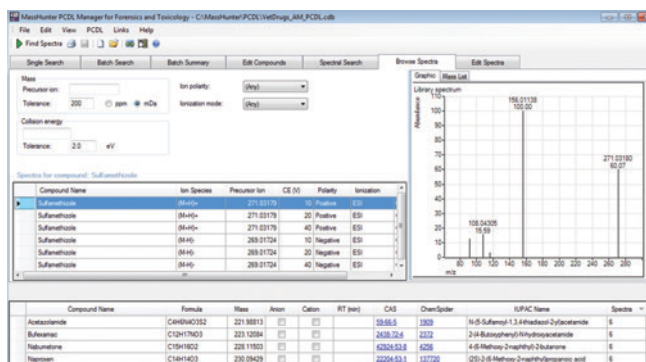
# PERFORM TRULY COMPREHENSIVE SCREENING FOR AN UNLIMITED NUMBER OF COMPOUNDS

Combine the Agilent Veterinary Drug PCDL with the accurate mass capabilities of LC/TOF and Q-TOF instruments.

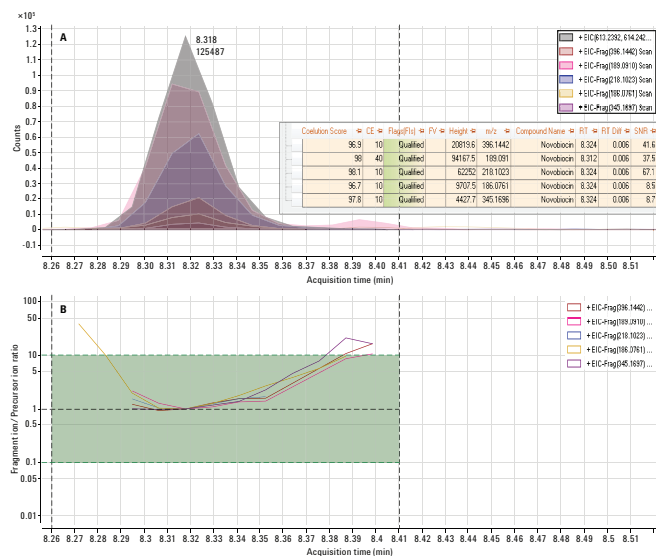
- **Acquire full-spectrum, untargeted data** using All Ions MS/MS
- **Identify compounds** through accurate mass, retention time, isotope pattern, and fragment confirmation
- **Perform presumptive matching** of acquired and library spectra—without the need to source standards
- **Create a custom PCDL** for more focused screening
- **Propose a suspect list** based on MS data and the “Find by Formula” algorithm
- **Confirm contaminants and eliminate false positives** with targeted MS/MS and library search
- **Mine data from Auto MS/MS experiments** using “Molecular Feature Extraction,” and search for proposed compounds against the PCDL

- **Add your own compounds and library spectra** to create PCDLs specific to your needs
- **Perform retrospective data analysis** using newly added PCDL compounds—without the need to re-run samples

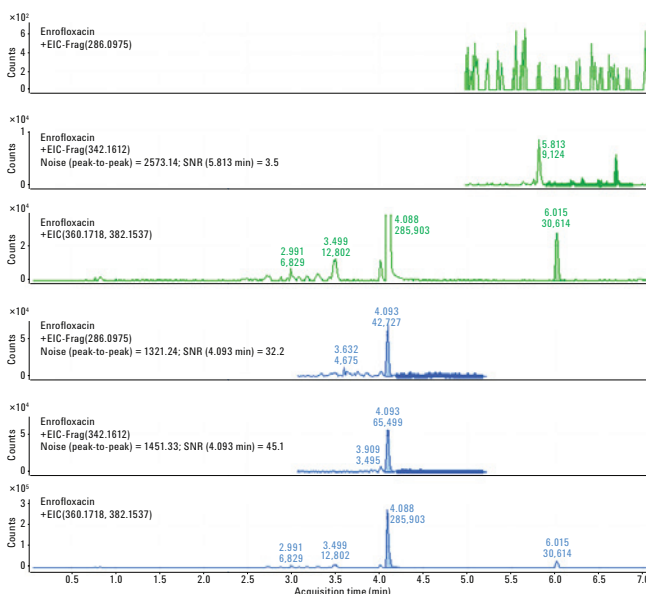
Simply put, the Veterinary Drug PCDL makes compound confirmation and data mining easier, even for high-throughput labs.



PCDL Manager Software makes it easy to control and edit the database and library.



Straightforward data mining and unambiguous identification using All Ions Software.



Potential false positive of enrofloxacin identified through fragment ion confirmation using the Agilent All Ions workflow.

# PROTECT OUR FOOD SUPPLIES AND COMPLY WITH REGULATORY STANDARDS

The Agilent Veterinary Drug PCDL can help you meet the strict requirements established by global food regulatory agencies, including the following:

## EU

Council Directive 96/23/EC

## U.S.

CFR Title 21 Part 556,  
USDA Anal Bioanal Chem 2014

## China/Japan

MOA Notice 235

## Available class tags

Insecticides, beta-agonists, antibiotics,  
anti-inflammatories, anti-psychotics,  
tetracyclines, dyes, anti-parasitics,  
pesticides, sedatives, herbicides,  
fungicides, equine drugs

## Maximize your data quality with database and library curation

- Compound common name and IUPAC name
- Accurate mass of neutral molecule
- Molecular formula and structure
- Ion type (anion, cation, or neutral)
- CAS number/PubChem link (if existing)
- ChemSpider ID and hyperlink (if existing)
- Precursor and product ion peaks corrected to theoretical accurate mass
- Spectra acquired at 10, 20, and 40 V collision energy
- Spectra measured in positive and/or negative ion mode, where applicable
- Spectra filtered for signal intensity and curated for spectrum noise, chemical impurities, and incorrectly set instrument parameters
- Includes adduct & loss spectra

## Application consulting lets you focus on what you do best

### Installation and familiarization (optional):

Experienced service personnel will install the PCDL, verify all functions with an Agilent checkout sample, and familiarize you with the supporting software.

### Advanced application consulting (optional):

Let us help you get the most out of your PCDL by setting up screening methods for your samples of interest.

Learn how to analyze more veterinary drugs, faster.  
Visit [www.agilent.com/chem/application-kits](http://www.agilent.com/chem/application-kits)

## Complete your veterinary drug analysis workflow

### MassHunter data acquisition and analysis software

Quickly implement high-quality screening methods, and modify these methods to meet your future needs. You can also customize your PCDL to suit your application.

### Agilent 1290 Infinity II LC system

Achieve unmatched chromatographic resolution and reduced runtimes, and produce the high-quality data you need for sensitive, reproducible screening.

### Agilent TOF and Q-TOF LC/MS systems

The full-scan capability and mass accuracy of All Ions MS/MS lets you access all the data, all the time, so you can screen for large numbers of suspect and unknown veterinary drugs. What's more, the Agilent Jet Stream electrospray ion source dramatically lowers your detection limits.

### Agilent LC columns, supplies, and sample prep products

Increase your uptime and achieve the best scientific outcomes.



### Ordering Information:

#### Veterinary Drug Personal Compound Database and Library (G3879CA)

##### Required but not included with the Veterinary Drug PCDL:

Agilent 1260 or 1290 Infinity II LC

Agilent 6200 Series TOF or 6500 Series Q-TOF LC/MS

Agilent MassHunter Acquisition Software (B.05 or higher) and Windows 7 (64-Bit)

Agilent MassHunter Qualitative Analysis Software (B.07 SP1 or higher)

Agilent MassHunter Quantitative Analysis Software (B.07 or higher)

OPTIONAL: G3878CA #001 Installation and Familiarization Service

OPTIONAL: Advanced Application Consulting H2149A (Americas); R1736A (other regions)

### Put your lab on the productivity fast track

Contact your local Agilent Representative or Agilent Authorized Distributor at [www.agilent.com/chem/contactus](http://www.agilent.com/chem/contactus)

Or call **800-227-9770** (in the U.S. or Canada)

For a description of available LC/MS Databases and Libraries, and GC/MS Analyzers, visit [www.agilent.com/chem/ms](http://www.agilent.com/chem/ms)

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