STREAMLINE YOUR TARGETED SCREENING OF VETERINARY DRUGS

Agilent Veterinary Drugs tMRM Database

To meet the strict limits of veterinary drugs in meats, labs must be able to quantify trace-level veterinary drug residues—and *positively confirm* their identities.

Based on its selectivity and sensitivity, triple quadrupole LC/MS is considered the "gold standard" for veterinary drug testing in a variety of complex matrices; however, method development can be difficult and time consuming.

Minimize the need for tedious method development with a database of MRM transitions

You can instantly build targeted screening and quantitation methods for a few—or hundreds—of veterinary drugs in a single run by combining the Agilent Veterinary Drug tMRM Database with Agilent Triple Quadrupole LC/MS systems.

The database contains hundreds of triple quadrupole LC/MS transition parameters, allowing you to create MRM, dynamic MRM (dMRM), or triggered MRM (tMRM) methods, based on your analytical needs.

The following components are included in the Agilent Veterinary Drugs tMRM—saving you time and maximizing performance

- Curated database with more than 650 compounds
- Up to 10 MRM transitions, fragmentor voltages, and collision energies for each compound—applicable across all Triple Quadrupole LC/MS platforms
- Quick-start guide with data examples and familiarization exercises
- Method Setup Guide that shows you how to create MRM, dMRM, and tMRM methods
- Application notes with detailed LC/MS method information
- Optional installation and familiarization with checkout test mix and column
- Optional advanced application consulting, customized for your method
- Free database upgrades for 3 years

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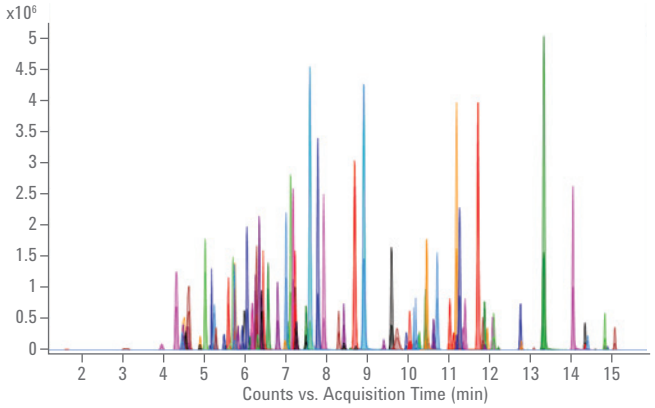
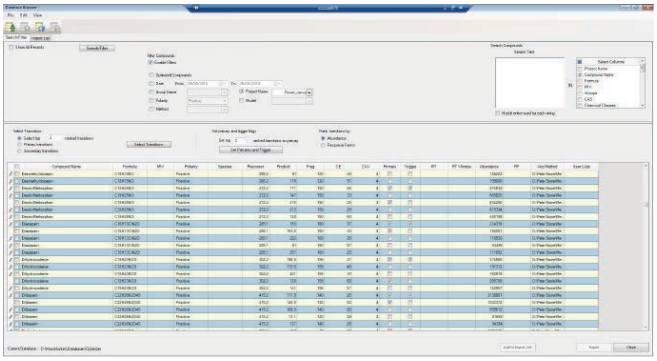
CONFIDENTLY DETECT AND CONFIRM LOW-LEVEL VETERINARY DRUGS IN FOOD

Combining the Agilent Veterinary Drug tMRM Database with the high sensitivity and accurate quantitation of triple quadrupole LC/MS instruments enables you to:

- **Easily create an MRM method** by importing settings like compound names, primary MRM transitions, fragmentor voltages, and collision energies. MRM methods are ideal for fast screening and quantitation of a limited number of veterinary drugs without the need to know retention times.
- **Evaluate retention times and retention time windows** to update MRM methods to dMRM methods. dMRM increases sensitivity by maximizing dwell time for analytes within their time window. It is appropriate for screening and quantitation of hundreds of veterinary drugs within one run.
- **For additional specificity, you can create a tMRM method** by adding secondary transitions to a dMRM method. tMRM is particularly beneficial for isobaric compounds, and compounds affected by matrix interference. Additionally, tMRM is compatible with fast cycle times, so you can apply it to a subset of problematic compounds—or to all compounds in a multi-residue screen.
- **Create a reference library from your data** specific to your analysis and confirm results with a library match to confidently assess borderline results.



MRM chromatogram of over130 veterinary drugs in about 15 minutes



The Agilent Veterinary Drug tMRM database ensures fast, customized method development and can be easily expanded, or have subset databases created.

MAXIMIZE YOUR DATA QUALITY WITH DATABASE AND REFERENCE LIBRARY CURATION

Curated databases—each entry is reviewed for correctness, and includes:

- Compound common name
- CAS number of the native compound
- Molecular formula
- Unit mass of the neutral molecule
- MRM transitions (precursor and product m/z)
- Fragmentor voltage
- Collision energy
- Added retention times and retention time windows
- Added trigger parameters

MRM transition curation:

- MRM transitions are optimized using the Agilent MassHunter Optimizer software
- Optimized MRM data are reviewed for correctness
- Compounds include: Insecticides, beta-agonists, antibiotics, anti-inflammatories, anti-psychotics, tetracyclines, dyes, anti-parasitics, pesticides, sedatives, herbicides, fungicides, equine drugs

Application consulting lets you focus on what you do best

Installation and familiarization (optional):

Experienced service personnel will install the tMRM database, 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 tMRM database and reference library by setting up targeted screening methods for your samples of interest.

Learn how to meet—or exceed—global detection limits.
Visit **www.agilent.com/chem/application-kits**

Complete your targeted veterinary drug analysis workflow

MassHunter data acquisition and analysis software

Together with the tMRM database and reference library, this powerful software lets you quickly generate acquisition and analysis methods, which can be modified easily to meet your needs. In MassHunter Quantitative Analysis Software, you can use batch processing to flag outliers, and view compounds at a glance to review by exception.

Agilent 1290 Infinity II LC and Agilent 6400 Series Triple Quadrupole LC/MS systems

Proven choices for quantitative applications give you unmatched separation performance, superior sensitivity, renowned reliability, and overall robustness. 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 tMRM Database and Reference Library (G1735CA)
Required but not included with the Veterinary Drug tMRM Database:
Agilent 1260 or 1290 Infinity II LC
Agilent 6400 Series Triple Quadrupole LC/MS System
Agilent MassHunter Acquisition Software (B.06 or higher) and Windows 7 (64-Bit)
Agilent MassHunter Qualitative Analysis Software (B.06 or higher)
Agilent MassHunter Quantitative Analysis Software (B.05.02 or higher)
OPTIONAL: G1733CA #001 Installation and Familiarization Service
OPTIONAL: Advanced Application Consulting H2149A (Americas); R1736A (other regions)

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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**

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