

SIMPLIFY YOUR STARTUP FOR TARGETED DRUG SCREENING

The Measure of Confidence

QQQ LC/MS Forensic Toxicology MRM Database and Application Kit

Minimize the need for tedious manual method development with pretested methods and a triggered MRM (tMRM) database and reference library

Analyzing forensic toxicology compounds is challenging for two reasons: low concentrations and a large number of analytes to be monitored and quantified. With so many variables to consider, it can be difficult to find a solid starting point for method development.

A faster, easier way to develop customized screening methods

Agilent's Forensic Toxicology Screening tMRM database and Application Kit are truly unique, because much of the development work has already been completed. The kit features easy-to-use examples that show you how to set up screening methods and quickly adapt them to your specific needs. It also includes:

- The tMRM database and reference library for more than 2,800 Forensic compounds, including compound names, CAS registry numbers, up to 10 MRM transitions, fragmentor voltages, collision energies, and the ability to add retention times for each database compound entry for reliable forensic screening with tMRM library verification.
- Pretested analytical methods, using the tMRM database, are provided for target screening of analytes that are routinely monitored around the world.

The following components are included—saving you time and money:

- Agilent's >2,800-compound tMRM database with reference tMRM library spectra for approximately 100 compounds
- Comprehensive standard test mix with more than 130 compounds
- Agilent LC columns ideally suited for high resolution analysis of a wide range of compounds
- Quick-start and Method-Setup guides, along with an Application Note, that show you how to run the test mixes and create tMRM methods
- Examples of screening methods, data files, and reports
- On site application-based training to assist with method setup for quick and effective startup



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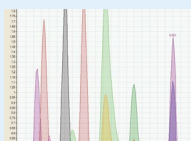
Quickly establish screening methods for complex matrices using these leading-edge technologies



A tMRM database and reference library, with Agilent MassHunter Data Acquisition and Analysis software, let you quickly generate acquisition and analysis methods, which can be easily modified to meet your future needs

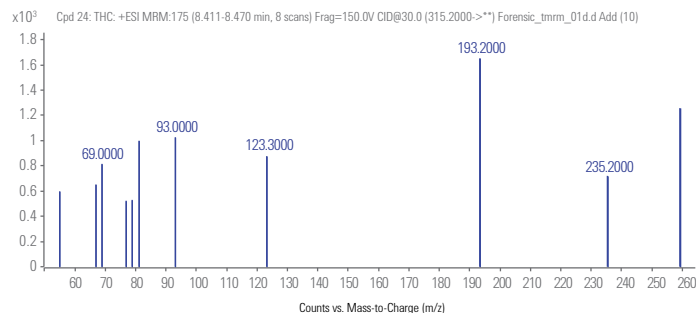


The Agilent 1290 Infinity II LC system and Agilent 6400 Series Triple Quadrupole LC/MS systems are proven choices for quantitative applications, giving you unmatched separation performance, superior sensitivity, renowned reliability, and overall system robustness. Agilent's Jet Stream Electrospray lowers detection levels of forensic compounds in complex matrices.



tMRM acquisition generates a library-searchable tMRM spectrum for each compound present to increase confidence in compound identification and quantitation, while avoiding false positive results.

Pre-developed examples help you implement your screening method in a fraction of the time



tMRM acquisition produces a tMRM product ion spectrum with up to 10 spectral peaks per compound present. These spectra are searched against a tMRM reference library for compound verification. Here, the tMRM product ion spectrum for THC was generated using tMRM acquisition on a 6460 QQQ LC/MS and Agilent 1200 SL series RRLC.

Compound Group	Compound Name	ISTD ¹	Precur Ion	MS1 Ret	Product Ion	MS2 Ret	Relay	Trigger	Threshold	Ret Time (min)	Delta Ret (min)	Fragment	Collision Energy	Cell Accelerator Voltage	Phase	Trigger Entrance	Trigger Delay	Trigger Window
Alprazolam	Alprazolam	1	309.1	Unit	281	Unit	SP	SP	150	5.95	0.63	179	25	5	Positive	0	0	0
	Alprazolam	1	309.1	Unit	295	Unit	SP	1	5.95	0.63	179	43	5	Positive				
	Alprazolam	1	309.1	Unit	274	Unit	1	1				179	49	5	Positive			
	Alprazolam	1	309.1	Unit	241	Unit	1	1				179	49	5	Positive			
	Alprazolam	1	309.1	Unit	234	Unit	1	1				179	49	5	Positive			
	Alprazolam	1	309.1	Unit	218	Unit	1	1				179	43	5	Positive			
	Alprazolam	1	309.1	Unit	195	Unit	1	1				179	43	5	Positive			
	Alprazolam	1	309.1	Unit	138	Unit	1	1				179	49	5	Positive			
	Cocaine	1	304.2	Unit	182.1	Unit	SP	SP	150	4.08	0.6	138	17	5	Positive	0	0	0
	Cocaine	1	304.2	Unit	77	Unit	SP	1		4.08	0.6	138	61	5	Positive			
Cocaine	1	304.2	Unit	272	Unit	1	1				138	61	5	Positive				
Cocaine	1	304.2	Unit	150	Unit	1	1				138	61	5	Positive				
Cocaine	1	304.2	Unit	119	Unit	1	1				138	61	5	Positive				
Cocaine	1	304.2	Unit	93	Unit	1	1				138	61	5	Positive				
Cocaine	1	304.2	Unit	67	Unit	1	1				138	61	5	Positive				

Dynamic MRM Parameters: Total MRMs = 138 Max Concurrent MRMs = 63 Min/Max Dwell = 4.44 ms/96.50 ms Triggered MRM: Enabled Repeats:

Agilent's tMRM acquisition software and Forensic Toxicology tMRM database and reference library ensure fast method implementation for targeted forensic screening with compound verification.

Ordering information:

Agilent's QQQ LC/MS Forensic Toxicology Application Kit (G1734BA)

The following are required but not included with the G1734BA kit:

- Agilent 1260 Infinity or 1290 Infinity II LC
- Agilent 6400 Series Triple Quadrupole LC/MS system
- Agilent MassHunter Acquisition Software B.06 or higher
- Agilent MassHunter Qualitative Analysis Software B.06 or higher
- Agilent MassHunter Quantitative Analysis Software B.05.02 or higher

Put your forensic lab on the productivity fast track.

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