Antibiotic analysis in food

Elevate your food testing with the X500R QTOF System

Method details and access to HR-MS/MS libraries to detect, quantify, and confirm antibiotic vet drugs in tissue extracts using HPLC coupled with the X500R QTOF system, powered by SCIEX OS Software..

Sample Prep

Step 1
- 1g Tissue homogenized with 10mL extraction solvent (1:5) Water Acetonitrile

Step 2
- Vortex, shake vigorously for 5 minutes, centrifuge (5000rpm, 5 minutes)

Step 3
- Decant supernatent to 15mL tube & add 500mg C18 sorbent.

Step 4
- Vortex, shake 30 sec, centrifuge (5000rpm, 1 minute).

Step 5
- Collect 5mL aliquot of extract and reduce in volume to <1mL.

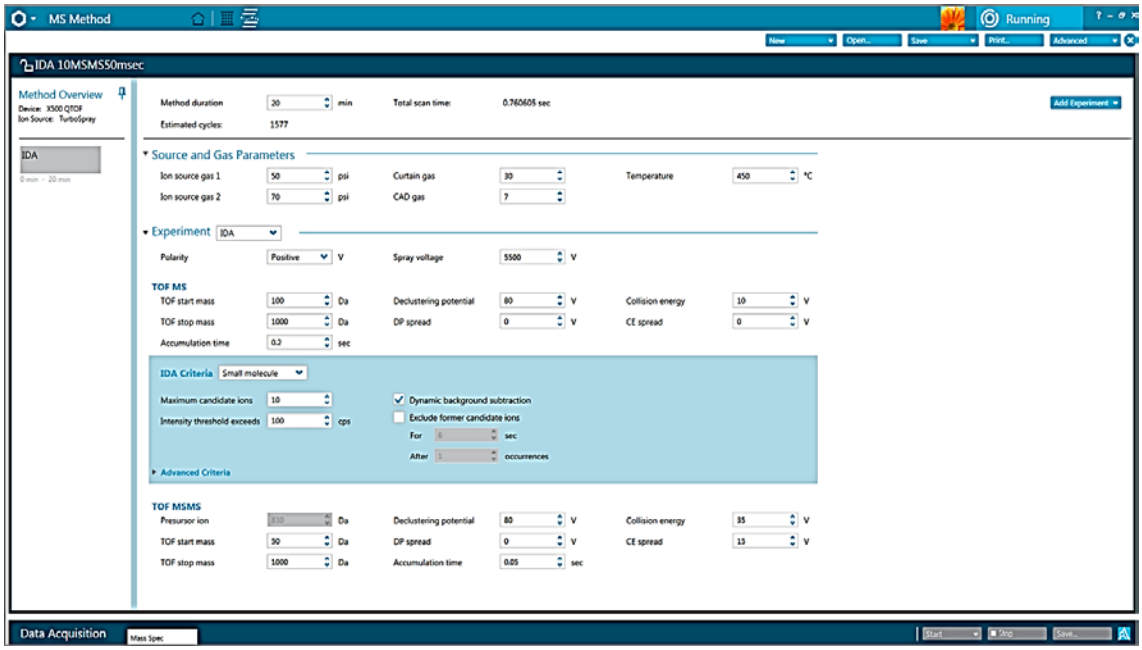
Step 6
- Bring to final volume of 1mL w/water and filter for analysis

Sample prep protocol adopted from:
Mastovska & Lightfield, J. Chrom. A., 2008, 1202, 118-123

LC Method

Column	Phenomenex Gemini 3µm C18 110Å column, 50 x 2.0mm	
Mobile Phase A	*0.1% formic acid in water*	
Mobile Phase B	*0.1% formic acid in methanol*	
Flow rate	*0.5 mL/min*	
Column temperature	*40℃*	
Injection volume	*10 uL*	
Gradient profile	**Time (min)**	**% B**
	0	*2*
	0.3	*2*
	7.27	*80*
	7.37	*99*
	10.9	*99*
	11	*2*
	15	*2*

MS Method



Suggested IDA (Information Dependent Acquisition) conditions for routine food contaminant testing as displayed in SCIEX OS.

Data Processing

Review your results with utmost efficiency using SCIEX OS for simultaneous quantitation and MS/MS library confirmation.

X500R High Resolution Libraries

Download a free XIC compound list detailing a full list of antibiotic compounds including molecular formula and accurate mass.

Download a free trial of the antibiotic high resolution MS/MS library, containing 244 compounds.

Learn more at sciex.com/X-Antibiotics.

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