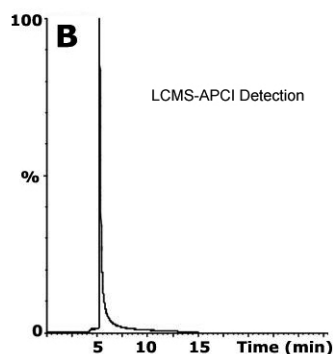
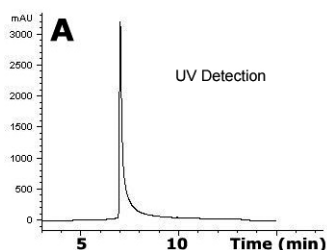
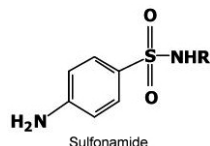


# Sulfonamide by LCMS

## An MS Friendly Method



**Note:** Sulfonamides are used for the treatment of infections and promotion of growth of livestock and fish. The residue of these veterinary drugs in food is of serious concern, due to the risk to human health (resistance to drugs and allergic or toxic reactions).

### Method Conditions

**Column:** Cogent Bidentate™, 4µm, 100Å  
**Catalog No.:** 40018-75P  
**Dimensions:** 4.6 x 75 mm  
**Mobile phase:** *Reverse Phase Gradient* :  
 Solvent A: 100% DI water + 0.1% formic acid  
 Solvent B: 100% acetonitrile

Time	%A	%B
0.00	70	30
0.00 – 0.20	70	30
0.20 – 5.00	0	100
5.00 – 10.00	0	100
10.00 – 10.01	70	30
10.01 – 15.00	70	30

**Flow rate:** 1.0 mL/min.  
**Injection Volume:** 10 µL  
**Peak:** 1mg of the compound dissolved in 1 mL of substituted sulfonamide (m/z 468) concentration for UV  
**Analysis:** 0.5 mg/mL and for LC/MS: 0.1 mg/mL  
**Detection:** A: UV 259 nm  
 B: LC/MS: Atmospheric Pressure Chemical Ionization in positive mode: APCI+, Single Ion Monitoring

### Discussion

The current sulfonamide detection methods are based on UV absorption, but there is a need for methods detecting residues below the maximum residue limits (MRL). LC/MS is a method of choice. A simple and quick RP gradient was used to transfer the HPLC/UV method to LC/MS for analysis of basic sulfonamides. APCI ionization mode was more advantageous than ESI.

For more information visit [www.MTC-USA.com](http://www.MTC-USA.com)

Cat. No.	Description
40018-75P	Cogent Bidentate™ C18 HPLC Column, 4µm \,100A 4.6mm x 75mm