Application Report 29

Analysis of Conjugated Flavonoids on Discovery HS C18

This application demonstrates the suitability of Discovery HS C18 for the analysis of disaccharide-conjugated flavonoids. Maysin, apimaysin and methoxymaysin structures along with the optimized chromatogram obtained on Discovery HS C18 are presented below.

Key Words

Maysin, Apimaysin, Methoxymaysin, Flavonoid, Flavone, Disaccharide, Aflatoxin, Maize, Corn, Cornsilk, Earworm, 569252-U, Discovery HS C18, Conjugated

Conditions

Column: Discovery HS C18, 15cm x 4.6mm ID, 3µm
Cat. No.: 569252-U
Mobile Phase: (80:20) 10mM sodium citrate (pH 7.0 with 10mM citric acid):CH₃CN, v/v
Temperature: 60°C
Flow Rate: 1.0mL/min
Detection: UV, 340nm
Injection Volume: 10µL
Sample: 50µg/mL each (Maysin, Apimaysin, Methoxymaysin) in 10mM sodium citrate (pH 7.0 with 10mM citric acid)

Peak IDs

1. Maysin
2. Apimaysin
3. Methoxymaysin

Structures

Maysin - G002049

Apimaysin - G002050

Methoxymaysin - G002051