

Application Report 123

LC-MS Analysis of Serotonin Metabolites Using Ascentis™ C18

Three serotonin metabolites are resolved on Ascentis C18, with identification of each provided by mass detection.

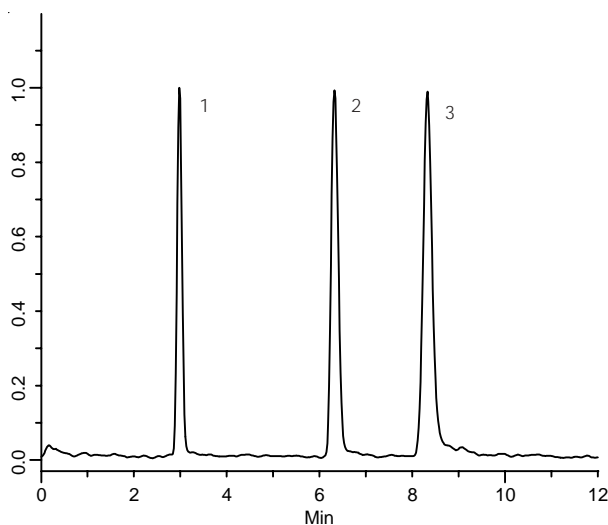
Key Words

tryptophan, T0254, 73-22-3, amino acid; 5-hydroxytryptophan, H9772, 145224-90-4; 5-hydroxyindoleacetic acid, H8876, 54-16-0; Ascentis C18, 5 μ , 4.6 x150mm, 581324-U, LC-MS, mass spectrometry

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Acquisition System: Thermo Surveyor LC & LCQ ion trap

Notebook Reference: 1498



G002449

Conditions

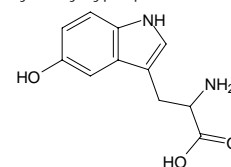
column: Ascentis C18, 15 cm x 4.6 mm I.D., 5 μ m particles (581324-U)
mobile phase: 80:20, 10 mM formic acid/acetate (pH 3.0):methanol
flow rate: 0.7 mL/min.
temp.: 35 °C
det.: ESI (+); overlay of extracted ion chromatograms of individual (M+H)⁺ species
injection: 10 μ L
sample: 25 mg/L in 90:10, 10 mM formic acid/acetate (pH 3.0):methanol

Peak IDs

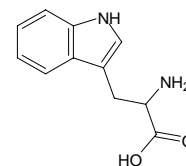
1. 5-hydroxytryptophan, (m/z 221)
2. Tryptophan, (m/z 205)
3. 5-hydroxyindoleacetic acid, (m/z 192)

Structures

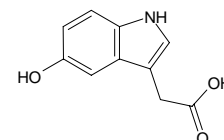
5-hydroxytryptophan - G002450



Tryptophan - G002451



5-hydroxyindoleacetic acid - G002452



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