Application Report 274

Analysis of Ribavirin Using Ascentis™ RP-Amide

The suitability of the Ascentis RP-Amide for the analysis of the purine nucleoside analog, ribavirin is demonstrated using 100% aqueous conditions, an alternative to the USP method. Ribavirin is polar and non-ionizable, thus a challenge to separate using traditional approaches as demonstrated by the USP method (water acidified with sulfuric acid to pH 2.5 and separated using a column consisting of sulfonated cross-linked styrene-divinyl benzene copolymer).

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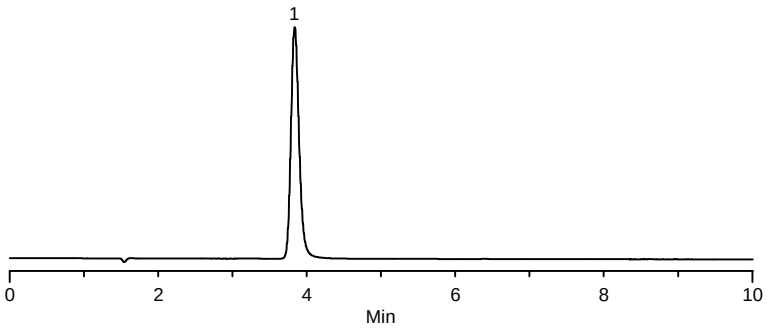
Acquisition System: Lab 42, Hitachi LC

Notebook Reference: 1550

Key Words

Ascentis RP-Amide, 565324-U, ribavirin, USP 1602706, 36791-04-5



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Conditions

column: Ascentis RP-Amide, 15 cm x 4.6 mm I.D., 5 µm particles (565324-U)
mobile phase: 25 mM ammonium acetate (pH 6.85, unadjusted)
flow rate: 1.0 mL/min.
temp.: 30 °C
det.: UV at 220 nm
injection: 20 µL
sample: ribavirin (100 mg/mL in mobile phase)

Peak IDs

1. Ribavirin (100 µg/mL)

Structures

Ribavirin - G003027