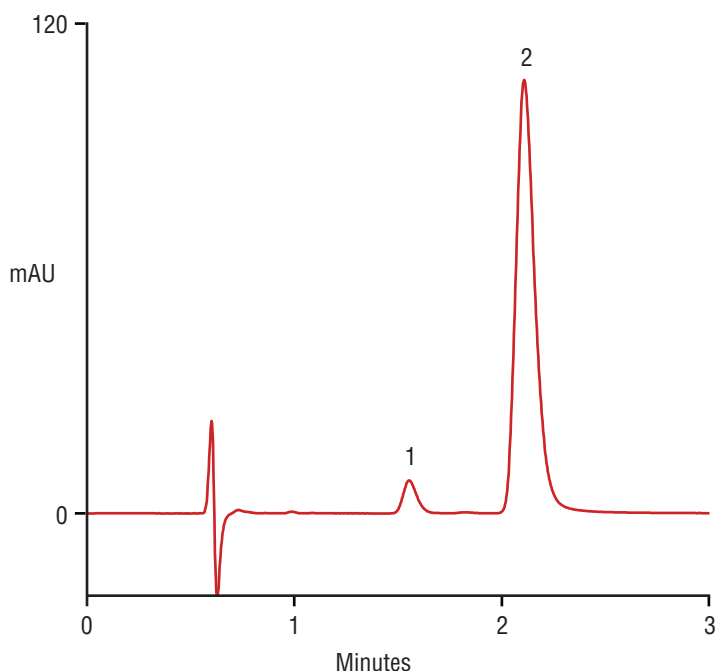


Metaraminol Bitartrate Separation Using a Thermo Scientific™ Acclaim™ Trinity™ P1 Column



Column: Thermo Scientific™ Acclaim™ Trinity™ P1, 3 µm
Dimension: 3.0 x 50 mm
HPLC System: Thermo Scientific™ Dionex™ UltiMate™ 3000 RSLC
Mobile Phase: 1.07 g Dibasic sodium phosphate dodecahydrate + 1.80 g monobasic sodium phosphate + 27 mg tetrasodium pyrophosphate decahydrate + 196 g acetonitrile + 750 g water
Flow Rate: 0.60 mL/min
Inj. Volume: 5.0 µL
Temperature: 30 °C
Detection: UV at 210 nm
Sample: Metaraminol bitartrate, 100 µg/mL
Peaks:

1. Tartrate
2. Metaraminol

27991

Metaraminol is an alpha-adrenergic agonist used to treat low blood pressure. The molecule is both hydrophilic and basic, making it difficult to analyze with conventional C18 columns. Since this drug molecule is often formulated as the bitartrate salt, the tartrate content needs to be determined to assess the mass balance. The Acclaim Trinity P1 column has unique chemistry which provides reversed-phase, weak anion-exchange, and strong cation-exchange retention mechanisms at the same time. It provides an ideal solution for simultaneous separation of the drug molecule and its counterion. A phosphate buffer system permits isocratic elution and UV detection of tartaric acid at 210 nm.