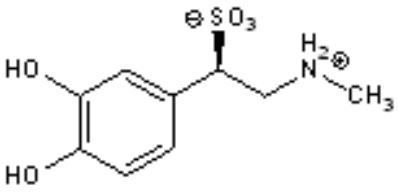
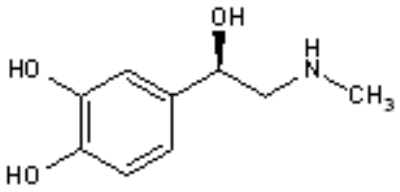
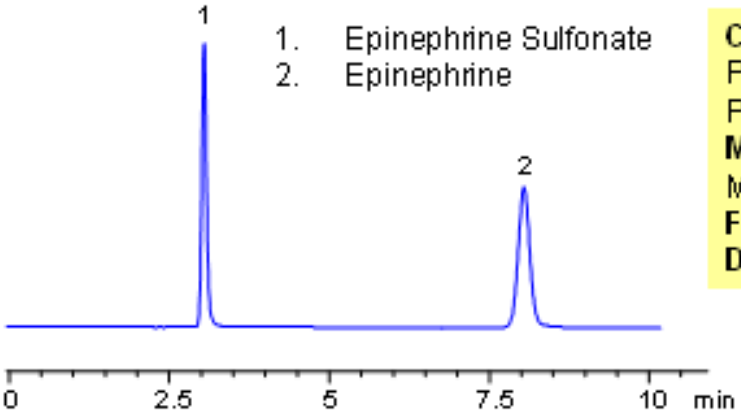
HPLC Separation of Epinephrine and Epinephrine Sulfonate







Column: serially connected Primesep SB (150 x 4.6 mm) and Primesep 100 (100 x 4.6 mm)
Mobile phase: MeCN -70%, AmFm 10 mM pH 3.5
Flow rate: 1.0 mL/min
Detection: UV 270 nm

Epinephrine and epinephrine sulfonate are separated on combination of Primesep 100 and Primesep SB HPLC columns. Primesep 100 column retains epinephrine by combination of reversed-phase and cation-exchange mechanisms. Epinephrine sulfonate is retained by weak reversed-phase mechanism. Due to strong zwitter-ionic nature of epinephrine sulfonate, ionic interaction is not available for this molecule. Compounds can be monitored by UV, ELSD, CAD or LC/MS.

Method Parameters

Column	Primesep SB, Primesep 100 4.6×250 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O – 70/30%
Buffer	AmFm
Flow Rate	1.0 mL/min
Detection	UV, 270 nm

Quelle: https://sielc.com/Application-HPLC-Separation-of-Epinephrine-and-Epinephrine-Sulfonate