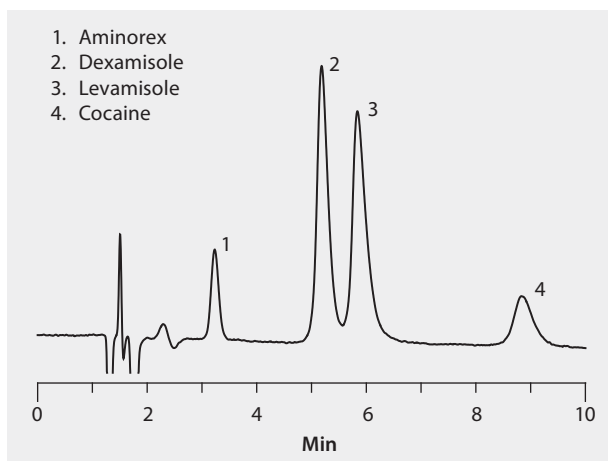


HPLC Analysis of Tetramisole Enantiomers and Related Compounds on Astec® CYCLOBOND® I 2000 DMP

Cocaine is often found laced with levamisole (one of the tetramisole enantiomers) and aminorex is a metabolite of levamisole known to cause serious vascular damage in drug abusers. These compounds are readily separated using the Astec CYCLOBOND column - a derivatized cyclodextrin column only offered by Supelco. What is really interesting about this separation is that it shows the ability of chiral HPLC columns to separate enantiomers (here, dexamisole and levamisole) by chiral discrimination, as well as non-chiral discrimination in the same analysis. The compounds aminorex and cocaine are not enantiomers of each other or of tetramisole. Fluka LC-MS CHROMASOLV solvents were used to supply low background interference and low particulate contaminants for robust, trouble-free operation. Cerilliant CRMs provided reliable identification and quantification.

market focus Pharmaceutical (small molecule)
column Astec CYCLOBOND I 2000 DMP 10 cm X 2.1 mm
mobile phase (A) 100 mM ammonium acetate, pH 5 with acetic acid (B) acetonitrile, 90:10, v/v
flow rate 0.2 mL/min
pressure 360 psi
column temp. 35 °C
detector UV, 220 nm
injection 2 µL
sample 100 ug/mL tetramisole and 50 ug/mL each cocaine and aminorex in water:methanol, 80:20, v/v
Application No. G006305



Related Products

analytical column

Astec® CYCLOBOND® I 2000 DMP Chiral HPLC Column ([Supelco 20724AST](#))

mobile phase component

Acetic acid ([Fluka 49199](#))

Acetonitrile ([Fluka 14261](#))

Ammonium acetate ([Fluka 14267](#))

Water ([Fluka 14263](#))

standard

Cocaine solution ([Cerilliant C-008](#))

(-)-Levamisole hydrochloride solution ([Cerilliant L-025](#))

Tetramisole hydrochloride ([Sigma T1512](#))