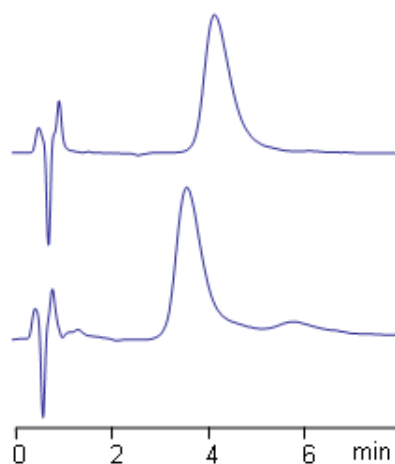


# HPLC Analysis of Drugs in Saliva

<https://sielc.com/Application-HPLC-Analysis-of-Drugs-in-Saliva>

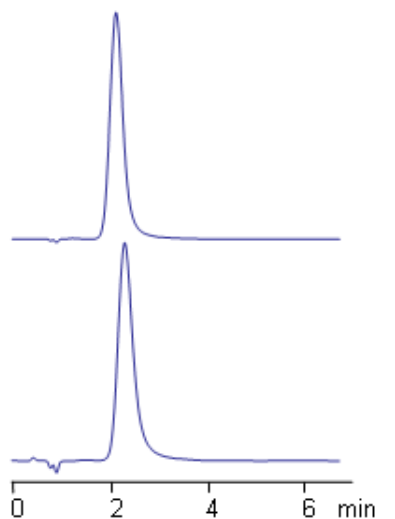
## Chromatogram



Dextromethorphan in  
saliva/water-1/1 injection #1

Dextromethorphan in  
saliva/water-1/1 injection  
#100

**Column:** Primesep D  
**Size:** 3.2 x 50 mm  
**Flow rate:** 0.5 mL/min  
**Detection:** UV 230 nm  
**Injection volume:** 5 µL  
**Drug concentration:** 1 mg/mL  
**Mobile phase:** MeCN/H<sub>2</sub>O - 5/95  
with 20 mM AmFm pH 2.8



Amitriptyline

Trimipramine

**Column:** Primesep D  
**Size:** 3.2 x 50 mm  
**Flow rate:** 0.5 mL/min  
**Detection:** UV 230 nm  
**Injection volume:** 5 µL  
**Drug concentration:** 1 mg/mL  
**Mobile phase:** MeCN/H<sub>2</sub>O - 10/90  
with HCOOH – 0.1%

## Description

The presence of three drugs, dextromethorphan, amitriptyline and trimipramine in saliva were analyzed by mixed-mode chromatography on a Primesep D reversed-phase anion-exchange column. No sample preparation is required as proteins from saliva are not retained at these conditions and elute in the void of the column due to cation-exclusion effect. Both column and proteins are positively charged at current conditions. Mobile phase consists of ACN-water-formic acid and is compatible with LC/MS detection technique. This general HPLC method can be used for analysis of hydrophobic basic drugs in biofluids.