

# Application Report 267

## Analysis of Common Cold Remedy Ingredients Using Ascentis™ RP-Amide

The suitability of Ascentis RP-Amide for the separation of ingredients commonly found in cold remedies; chlorpheniramine, acetaminophen, dextromethorphan and doxylamine is demonstrated.

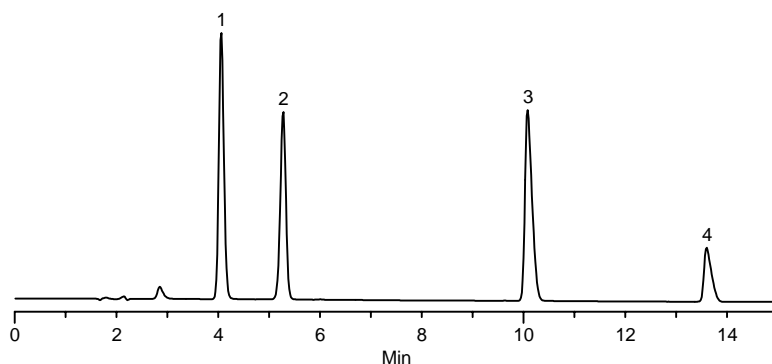
### Key Words

Ascentis RP-Amide (565324-U), antihistamine, doxylamine D3775 562-10-7, acetaminophen A7085 103-90-2, chlorpheniramine C3025 7054-11-7, dextromethorphan hydrobromide monohydrate D2531 6700-34-1, cold remedy

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Acquisition System: Waters

Notebook Reference: 1550



G003006

### Conditions

column: Ascentis RP-Amide, 15 cm x 4.6 mm I.D., 5 µm particles (565324-U)  
mobile phase A: 5 mM ammonium formate (pH 2.75 with formic acid)  
mobile phase B: acetonitrile  
flow rate: 1.0 mL/min.  
temp.: 30 °C  
det.: UV at 270 nm  
injection: 10 µL  
sample: as indicated in 5 mM ammonium formate (pH 2.75 with formic acid)

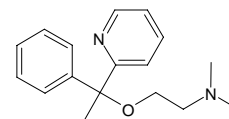
gradient:	Min	%A	%B
	0	90	10
	15	70	30
	17	70	30
	17.1	90	10

### Peak IDs

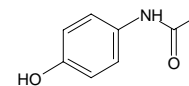
1. Doxylamine (100 µg/mL)
2. Acetaminophen (75 µg/mL)
3. Chlorpheniramine (125 µg/mL)
4. Dextromethorphan (150 µg/mL)

### Structures

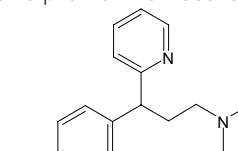
Doxylamine - G002923



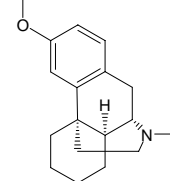
Acetaminophen - G002257



Chlorpheniramine - G002368



Dextromethorphan - G003005



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