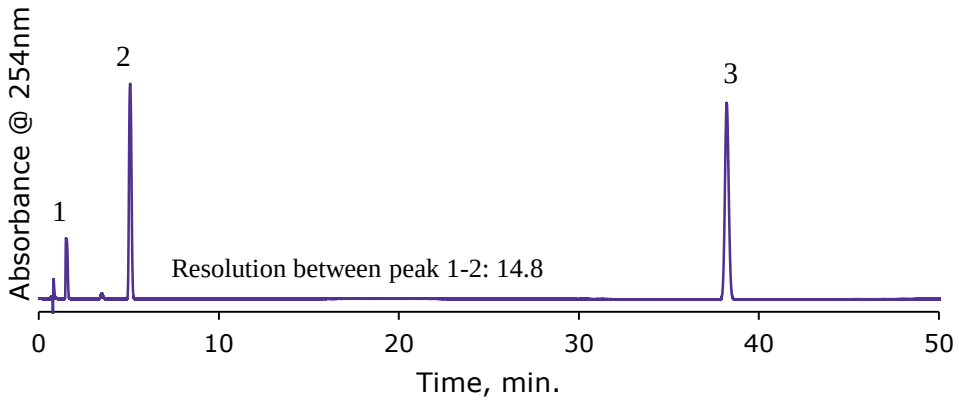
UHPLC Analysis of Paracetamol and Impurities on Ascentis® Express C18, 2.7 µm



Peak Number	Compound
1	4-aminophenol (Impurity K)
2	Paracetamol
3	N-(4-chlorophenyl) acetamide (Impurity J)

Conditions:

column: Ascentis® Express C18, 10 cm x 2.1 mm I.D., 2.7 µm

mobile phase: [A] 20 mM Potassium Phosphate Buffer, pH 7; [B] Methanol

gradient: Hold at 5% B for 1 min; 5% B to 10% B in 9 min; hold at 10% B for 10 min; 10% B to 34% B in 20 min; hold at 34% B for 10 min.

flow rate: 0.3 mL/min

column temp.: 30 °C

detector: UV, 254 nm

injection: 5 µL

sample: Paracetamol and its impurities, varied concentration, 95:5 water:methanol

Description:

Paracetamol, also known as acetaminophen, is a commonly used medicine that relieves symptoms such as fevers, headaches, and minor aches and pains. The Ascentis® Express C18 column is an ideal choice for separating paracetamol from two of its impurities using the European Pharmacopoeia 9.4 monograph. This method gives high resolution with enough separation in the baseline to find other impurities in the samples, if any are present at all.

Materials:

Product Part Number	Description
53823-U	Ascentis® Express C18, 10 cm x 2.1 mm I.D., 2.7 µm
Y0001955	4-aminophenol (Impurity K)
P0300000	Paracetamol
Y0001945	N-(4-chlorophenyl) acetamide (Impurity J)
34860	Methanol
270733	Water
1551139	Potassium phosphate monobasic
1551128	Potassium phosphate dibasic

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