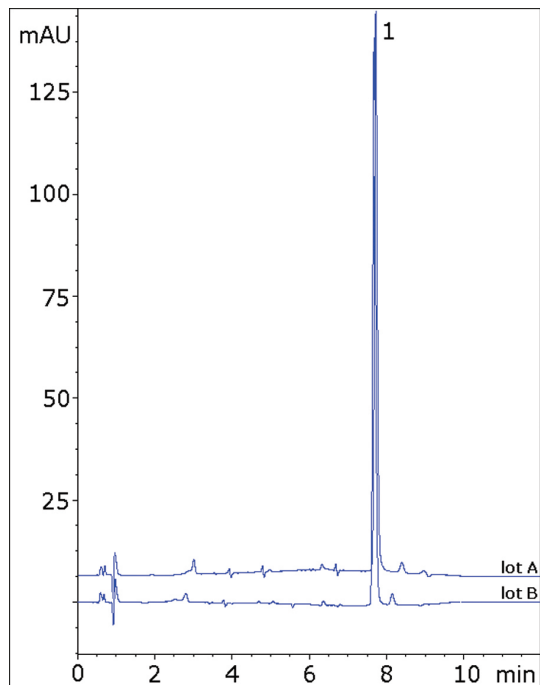
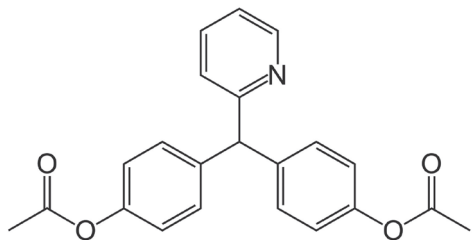


# Bisacodyl Tablet

## Separation of API from matrix peaks in real formulation



Overlay of runs from 2 column lots



Bisacodyl

**Note:** Bisacodyl is a stimulant laxative used in many common over-the-counter formulations. Brand names include Dulcogen®, Alophen®, and Dulcolax®.

### Method Conditions

**Column:** Cogent Bidentate C18™, 4µm, 100Å

**Catalog No.:** 40018-75P

**Dimensions:** 4.6 x 75 mm

**Solvents:** A: DI H<sub>2</sub>O / 10 mM ammonium acetate

B: 95% acetonitrile / 5% solvent A (v/v)

Gradient:	time (min.)	%B
	0	20
	1	20
	6	60
	8	60
	9	20

**Post Time:** 3 min

**Injection vol.:** 2µL

**Flow rate:** 1.0 mL/min

**Detection:** UV 254 nm

**Sample:** 5mg strength bisacodyl tablet was ground and added to a 10 mL volumetric flask containing a portion of solvent B. It was then sonicated 10 min and diluted to mark. After mixing, a portion was filtered with a 0.45µm nylon syringe filter (MicroSolv Tech Corp.).

**Peak:** 1. Bisacodyl

**t<sub>0</sub>:** 0.9 min

### Discussion

This HPLC method for a bisacodyl tablet formulation uses gradient mode to separate the API from several small matrix peaks. These peaks must be resolved from the main peak in order to ensure accurate quantitation. The data illustrates the separation potential of the Cogent Bidentate C18 column for assay or impurity methods of bisacodyl formulations. A mild pH was used in the mobile phase and extraction solvent to avoid any acid-catalyzed hydrolysis of the bisacodyl ester groups.

Runs from two column lots are shown in the figure, demonstrating consistency in the stationary phase manufacturing.