

## Deoxycholic Acid Assay Analyzed with HPLC – AppNote

### A Reliable Method for a Bile Acid

This Deoxycholic Acid Assay produces Run to Run consistency and Precision with Retention Time RSD values of 0.1%. A sensitive HPLC-UV Method that may be used for quantification in raw material and liquid pharmaceutical formulation is presented.



**Figure 1.**

Full Chromatogram

 **Figure 2.**

Magnified Chromatogram to show peak of interest

### Peak:



Deoxycholic Acid

### Method Conditions:

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

**Catalog No.:** 40018-15P

**Dimensions:** 4.6mm x 150mm

#### Mobile Phase:

A: DI Water

B: 20:80 Acetonitrile / Buffer (50mM KH<sub>2</sub>PO<sub>4</sub> pH adjusted to 7.5)

C: Acetonitrile

Time (minutes)	A	B	C
0	55%	20%	25%
2	55%	20%	25%
2.05	48%	20%	32%
8	48%	20%	32%
8.05	20%	20%	60%
11	20%	20%	60%
11.05	55%	20%	25%
15	55%	20%	25%

**Injection vol.:** 100µL

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 205nm

**Column Temperature:** 35°C

**Sample Preparation:** Deoxycholic Acid 50µg / mL in DI Water

**Note:** Deoxycholic Acid also known as Cholanoic Acid and sometimes sold as Kybella™ or Belkya™, is one of the secondary bile acids, which are metabolic byproducts of intestinal bacteria and can be used to determine intestinal fat adsorption. Another research application is when a micelle is formed with it, it can be used as a mild detergent for the isolation of membrane proteins.

**This Method was developed by and is presented courtesy of [ARL- Eutech Scientific Services](#).**



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**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

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