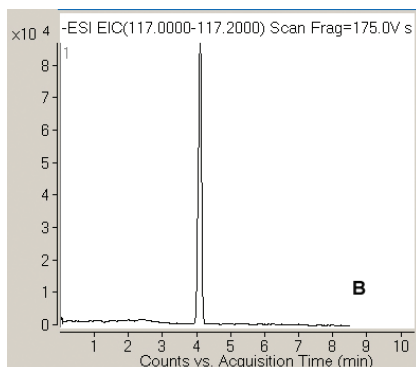
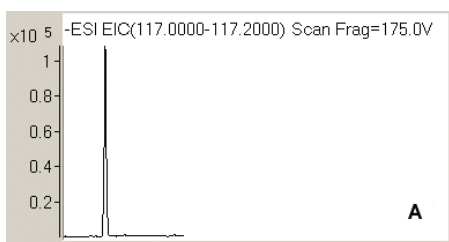
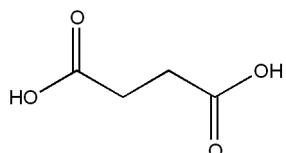


## Succinic Acid: Rapid & Cost Effective Isocratic or Gradient



**Notes:**

There is large interest in the production of this organic acid because it is a key compound in producing more than 30 commercially important products including Pharmaceuticals, foods, dyes, perfumes, lacquers, metal treatment, water cooling and many other uses. An intermediate of tricarboxylic acid cycle, succinic acid is produced and accumulated by anaerobic microorganisms.

**Method Conditions**

**Column:** Cogent Diamond Hydride™ 4µm, 100Å.  
**Catalog No.:** 70000-15P-2  
**Dimensions:** 2.1 x150 mm  
**Solvents:** A: DI water + 40mM ammonia  
 B: acetonitrile + 40mM ammonia  
**Mobile phase:** Chromatogram A:  
**Isocratic:** 90%B RT succinic acid = 1.129 min  
 Chromatogram B:  
 gradient ANP gradient B RT succinic acid = 4.111 min  
**Gradient:** 0 min 95% B  
 0–5 min to 75.0% B  
 5-10 min 75% B  
**Post time:** 5 min  
**Flow rate:** 0.4 mL/min.  
**Sample:** Succinic acid 117 m/z (M - H)-  
 100 ng/mL prepared in 50%A/50%B and diluted 1:10 before analysis  
**Detection:** ESI – neg - Agilent 6210 MSD TOF mass spectrometer.

**Discussion**

The analysis of succinic acid is mostly done using gas chromatography (GC), enzymatic assays, ion-exclusion chromatography (IEC) or by high performance liquid chromatography (HPLC). However, these methods are time consuming and analysis time is very often longer than 1 hour. In the present application note we are reporting rapid, cost effective screening method for the detection of this important organic acid.

For more information visit [www.MTC-USA.com](http://www.MTC-USA.com)

Cat. No.	Description
70000-15P-2	Cogent Diamond Hydride™ HPLC Column, 100Å, 4µm, 2.1 x 150mm