

## MMA Calibration from Human Serum on Gemini C18, 3u, 100x3 mm

**Column:** Gemini® 3 µm C18 110 Å, LC Column 100 x 3 mm, Ea  
**Dimensions:** 100 x 3 mm ID  
**Order No:** 00D-4439-Y0  
**Elution Type:** Gradient  
**Eluent A:** 0.1% Formic Acid in DI H2O  
**Eluent B:** 0.1% Formic Acid + 10 mM Ammonium Formate in MeOH

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	85	15
	2	1.5	5	95
	3	2.5	5	95
	4	2.51	85	15
	5	4.5	85	15



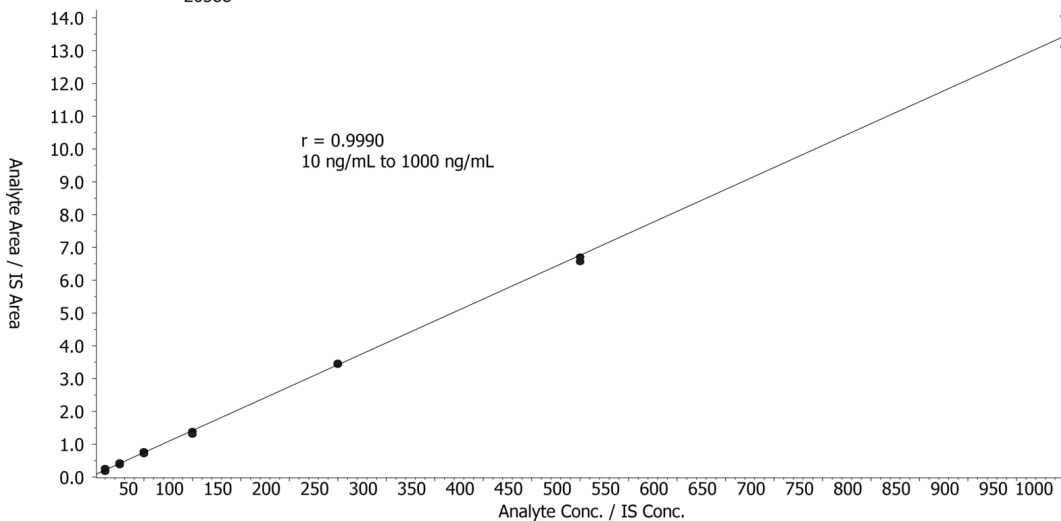
Products used in this application:



**Flow Rate:** 700 µL/min  
**Col. Temp.:** 40 °C  
**Detection:** Tandem Mass Spec (MS-MS) @ (ambient)

**Detector Info:** <a target="\_blank" href="https://sciex.com/products/mass-spectrometers?utm\_campaign=2019%20application%20search&utm\_source=phenomenex&utm\_medium=referral">SCIEX</a>  
**Analyst Note:** SecurityGuard™ Guard Cartridge System extends column lifetime.

- SecurityGuard Cartridges, Gemini C18 4 x 2.0mm ID, 10/PK Part No.: AJ0-7596
- Holder Part No.: KJ0-4282



### ANALYTES:

- 1 Succinic acid**  
Retention Time: 1.16 min
- 2 Methylmalonic acid-d3**  
Retention Time: 1.48 min
- 3 Methylmalonic acid**  
Retention Time: 1.5 min

