

Unison UK-C8

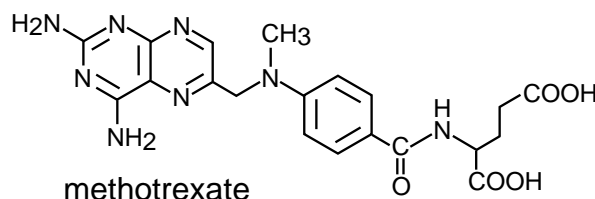
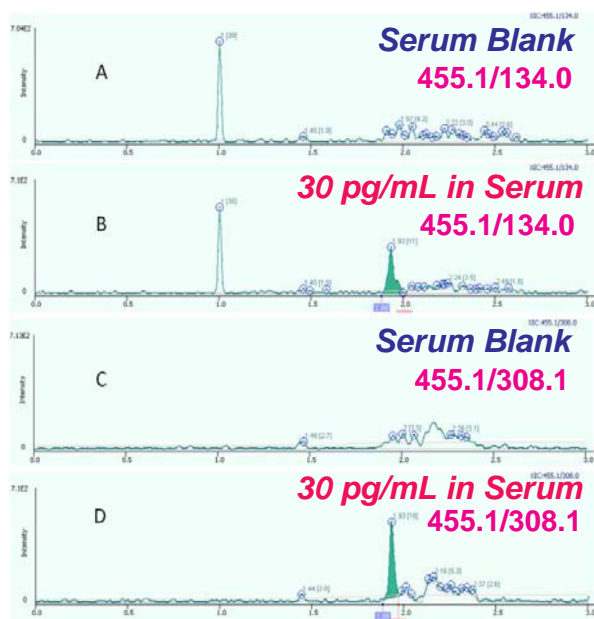
75 x 2 mm

Application

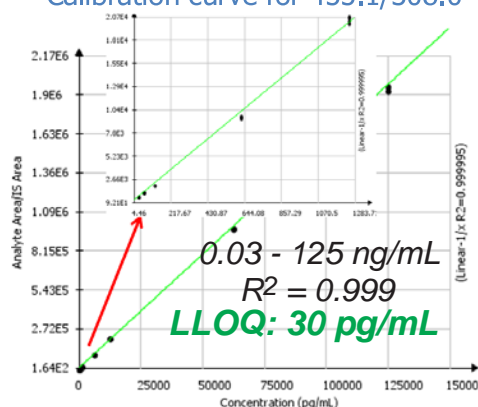
# High Sensitivity Methotrexate Quantitation in Human Serum Utilizing IONICS 3Q 210 Triple Quadrupole Mass Spectrometer

ヒト血清中のメトトレキサートの高感度LC-MS/MS分析

### Extracted Ion Chromatogram (EIC)



### Calibration curve for 455.1/308.0



### Intra-day variability (%RSD)

MRM	QC1(low)	QC2(med)	QC3(high)
455.1/134.0	5.1	1.2	1.0
455.1/308.0	6.9	1.8	0.5

### Inter-day variability (%RSD)

MRM	QC1(low)	QC2(med)	QC3(high)
455.1/134.0	2.6	3.0	3.5
455.1/308.0	7.0	3.6	3.8

### Mass Spectrometry Conditions

#### IONICS 3Q 210

Settings used on the 3Q 210 during the method

ESI Voltage (Volts)	5000
HSID Temp. (°C)	300
Nebulizer Gas Setting	400
Drying Gas Setting	120
Heating Gas Setting	350
Source Temp. (°C)	250
Dwell Time (ms)	100
Pause Time (ms)	5

Selected MRM operating conditions for methotrexate

MRM	CE	CCL2	CCL4	EV
455.1/308.0	28	-100	-90	30
455.1/134.0	48	-100	-90	30

### LC Conditions

Unison UK-C8, 75 x 2 mm

A: 0.1% formic acid (aq)

B: methanol

5%B (0-0.1min)

5-95%B (0.1-0.6min)

95%B (0.6-1min)

95-5%B (1-11min)

5%B (1.1-3min)

0.4 mL/min, 5 µL injection