

Analysis of Organic Acids by MS Detector

Chromaster 5610 MS Detector is a mass detector with new concept, designed for LC users, and it is different from conventional mass spectrometers. Organic acids greatly affect the tastes and flavors of foods and therefore, are frequently analyzed for the purpose of research and development, quality control, etc. In addition to food products, various products such as drugs, culture liquids, plating solutions, and cosmetics are being analyzed. This time, six organic acids are separated by using a HILIC column and detected by Chromaster 5610 MS detector, and the example is introduced here.



5610 MS Detector

LC-MS Analysis of 6 Organic Acids

Analytical Conditions

Table 1 Conditions for MS Detector Setting

Ionization method	ESI
Ionization mode	Negative
Ionization voltage	2300 V

Table 2 Analytical Conditions for HPLC

Column	Inertsil HILIC (3 μ m) 4.6 mm I.D. x 250 mm
Mobile phase	CH ₃ OH / 10 mmol/L CH ₃ COONH ₄ = 90 / 10
Flow rate	1.0 mL/min (split into 250:1)
Injection vol.	10 μ L

LC-MS Analysis

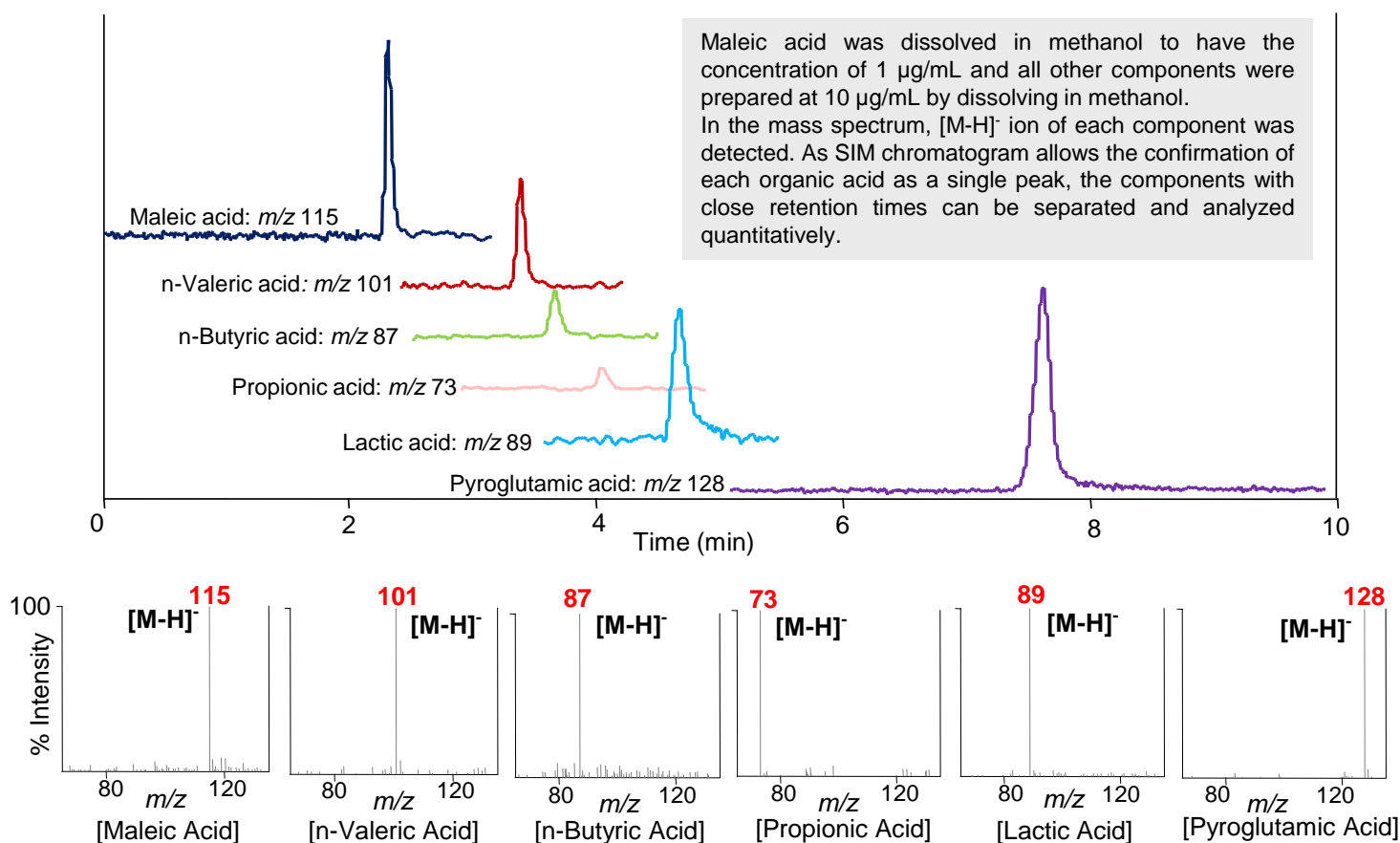


Figure 1 Mass Spectra and SIM Chromatograms of 6 Organic Acids

<Main system configuration> Chromaster 5110 Pump, 5210 Autosampler, 5310 Column Oven, 5610 MS Detector

NOTE: These data are an example of measurement; the individual values cannot be guaranteed.