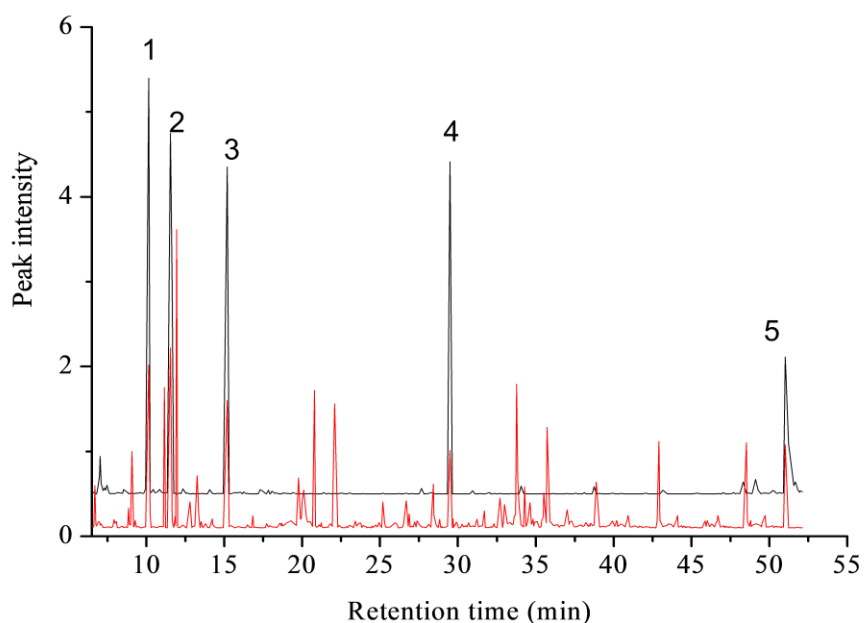


The identification of the five compounds

Figures 6-11 show the further qualitative analysis of the five metabolites by comparing their retention time and fragment-ion of the chromatograms between the urine sample and the corresponding standards, respectively.



(4). 4-hydroxybenzeneacetic acid, (3). 5-Trimethylsilyloxy-n-valeric acid, (1) hydracrylic acid, (2).propanedioic acid ,(5)uric acid

Fig 6 Chromatograms of the five compounds in standard solution (black) and urine sample (red)

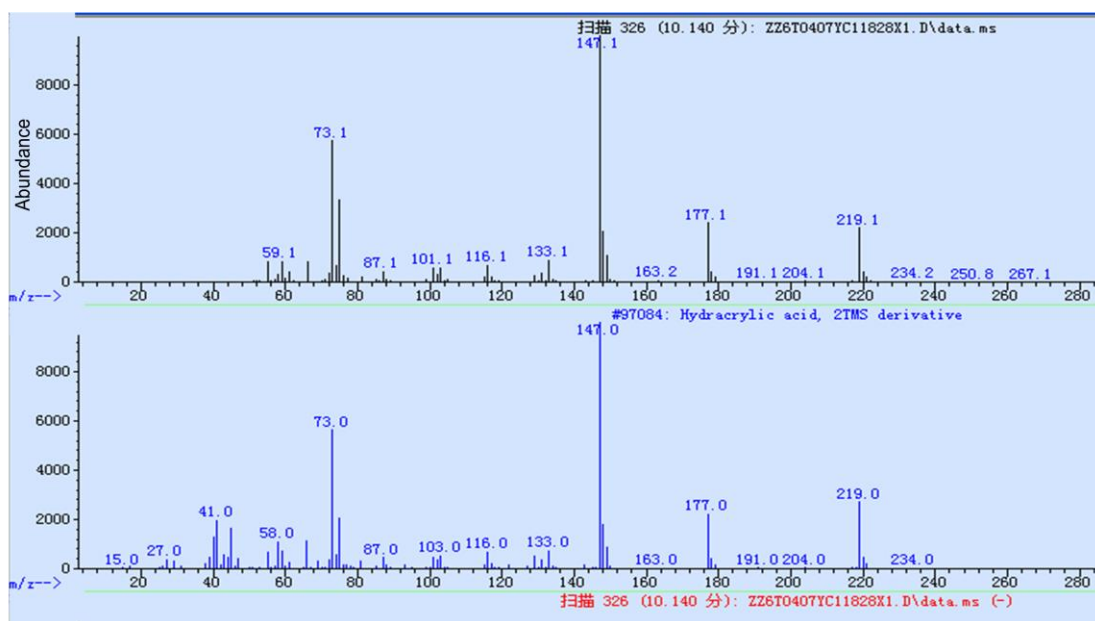


Fig 7 Electron-impact mass spectrum of hydracrylic acid TMS derivative.

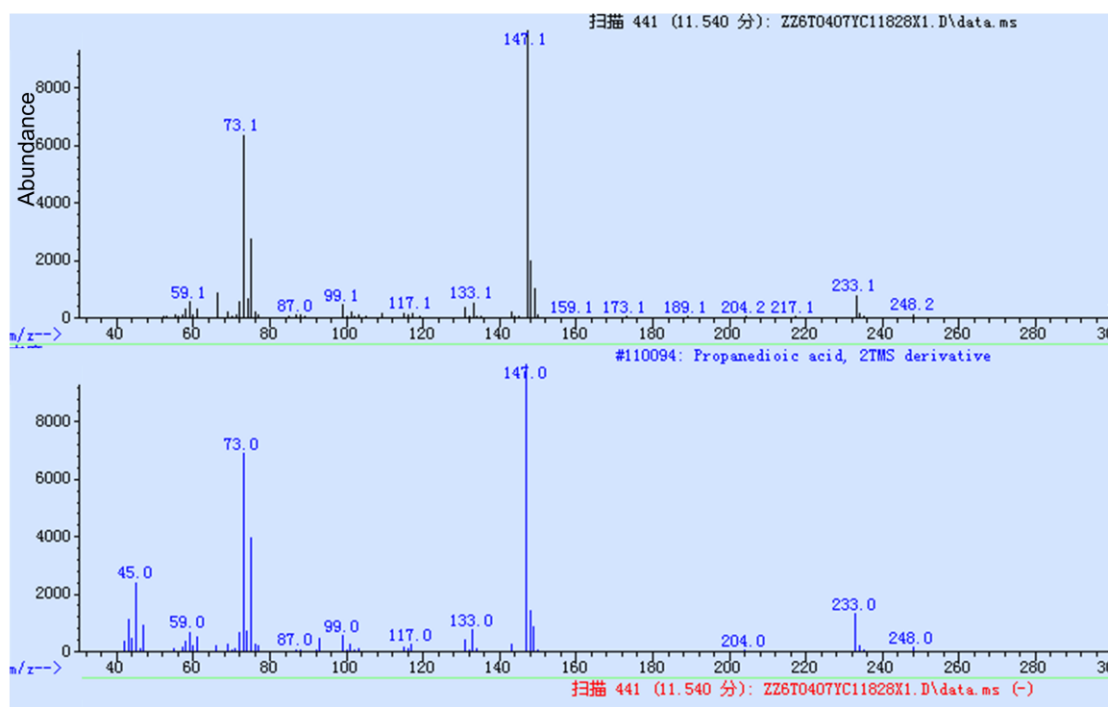


Fig 8 Electron-impact mass spectrum of propanedioic acid TMS derivative.

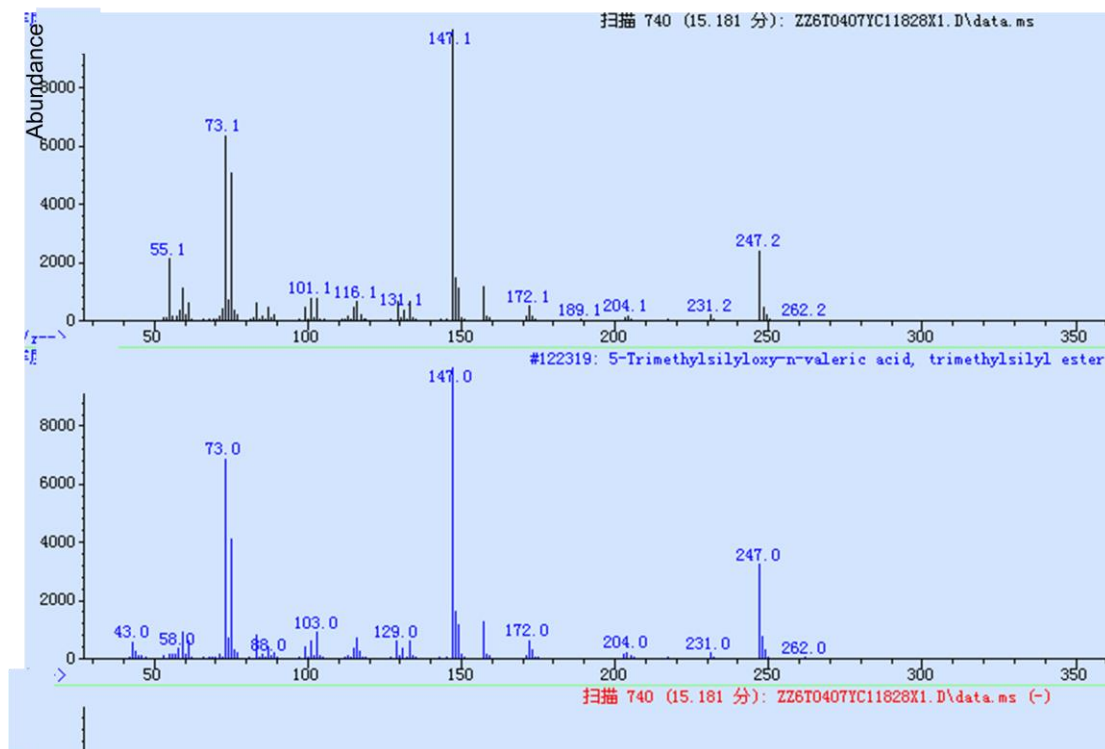


Fig 9 Electron-impact mass spectrum of 5-Trimethylsilyloxy-n-valeric acid TMS derivative.

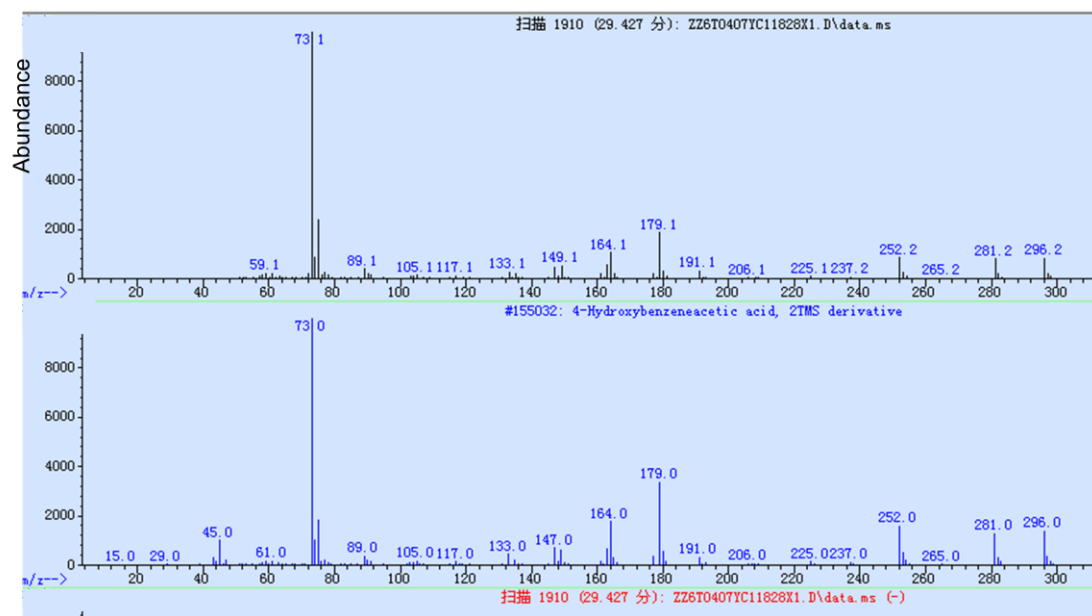


Fig 10 Electron-impact mass spectrum of 4-hydroxybenzeneacetic acid TMS derivative

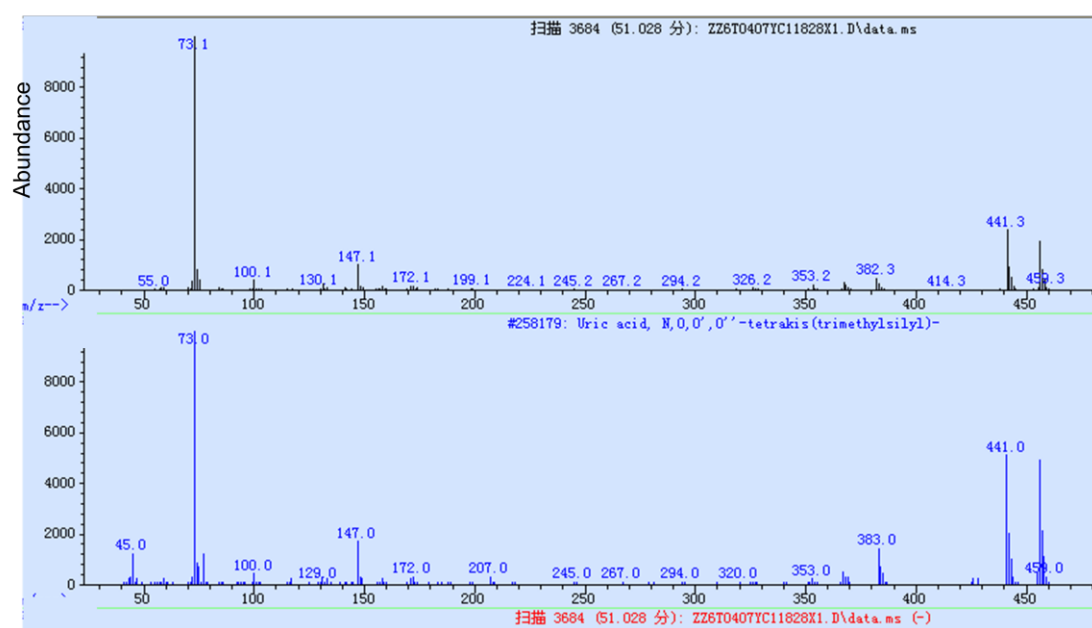


Fig 11 Electron-impact mass spectrum of uric acid TMS derivative.