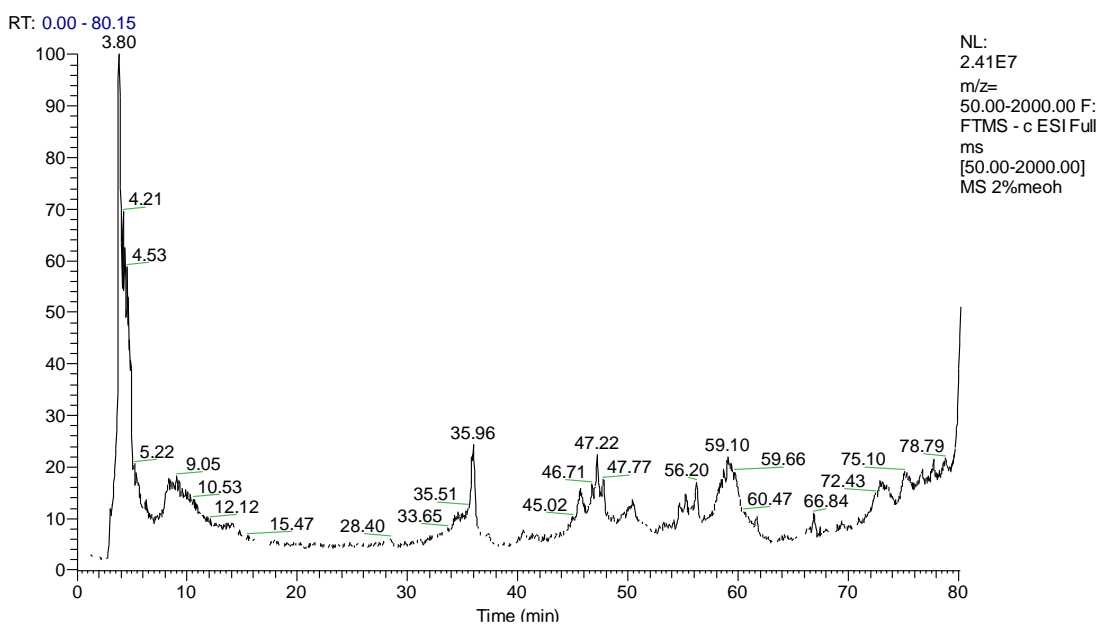


**Fig. S1** Base peak chromatograms of ingredients from LRM by UHPLC-LTQ-Orbitrap in ESI<sup>+</sup>.



**Fig. S2** Base peak chromatograms of ingredients from LRM by UHPLC-LTQ-Orbitrap in ESI<sup>-</sup>.

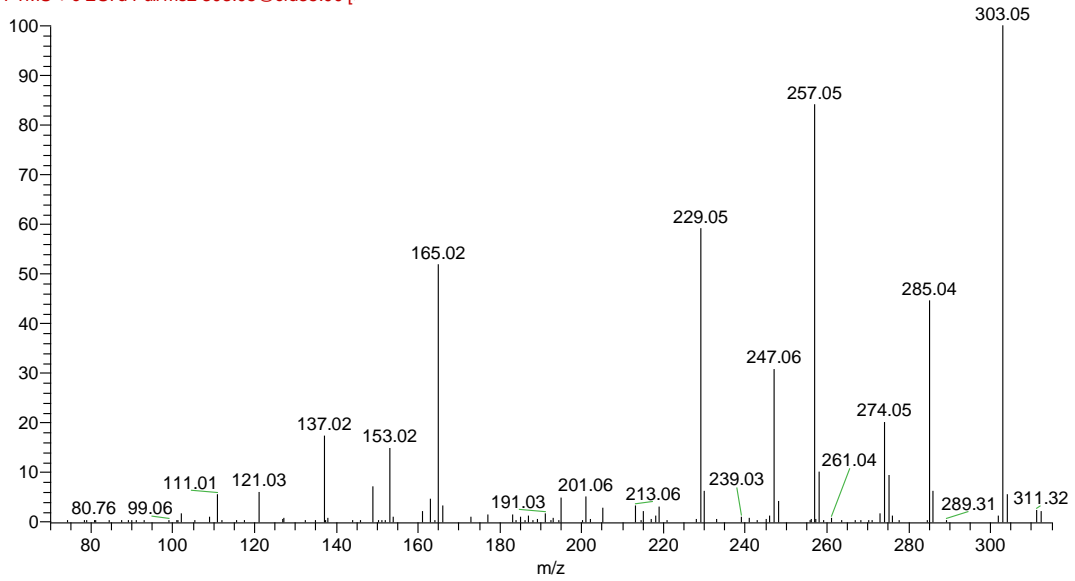


Fig. S3 The MS/MS spectra of peak 32 (Quercetin).

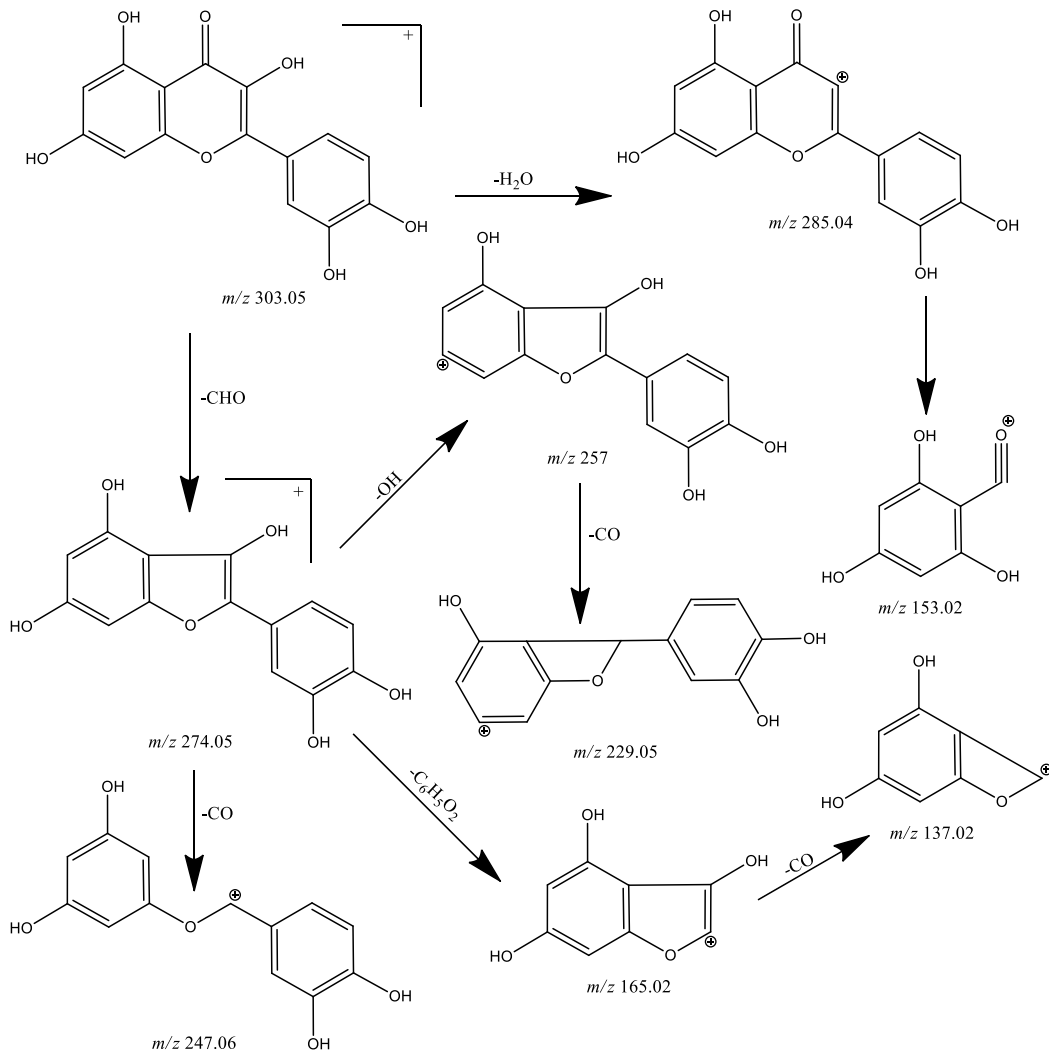
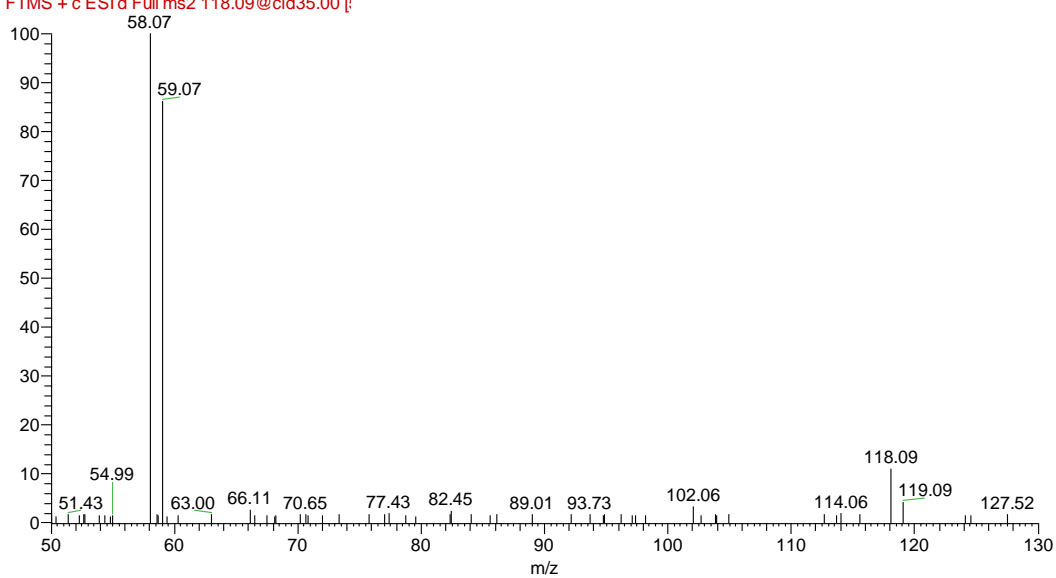
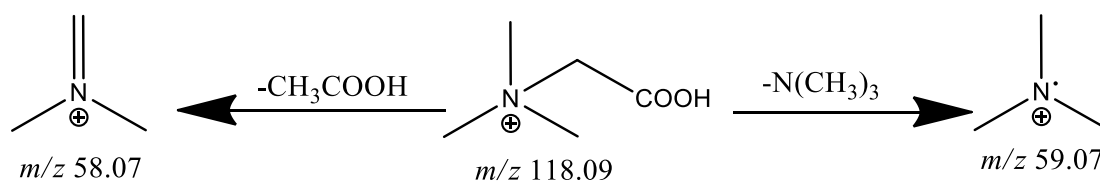


Fig. S4 The proposed fragmentation pathways of peak 32 (Quercetin).

2%meoh\_170327225754 #672 RT: 5.23 AV: 1 NL: 1.52E6  
F: FTMS + c ESI d Full ms2 118.09@cid35.00 [

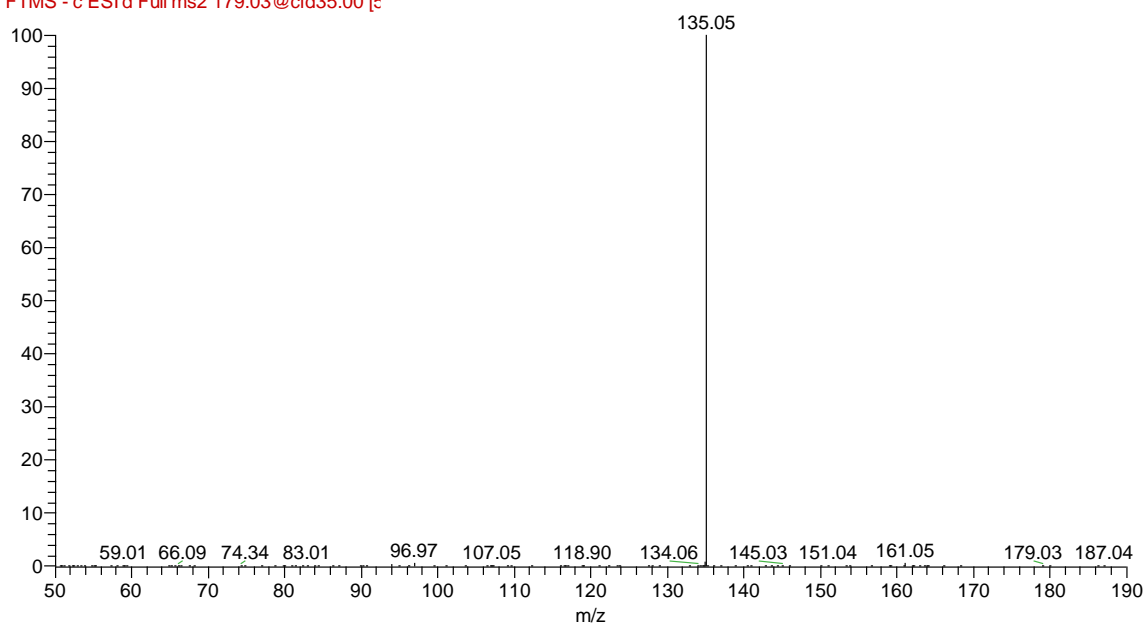


**Fig. S5** The MS/MS spectra of peak 4 (Betaine).

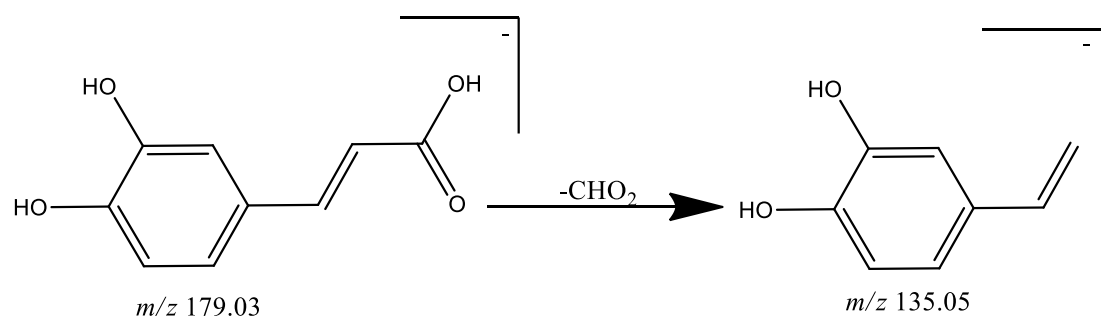


**Fig. S6** The proposed fragmentation pathways of peak 4 (Betaine).

2%meoh #3073 RT: 37.61 AV: 1 NL: 4.18E4  
F: FTMS - c ESId Full ms2 179.03@cid35.00 [E



**Fig. S7** The MS/MS spectra of peak 17 (Caffeic acid).



**Fig. S8** The proposed fragmentation pathways of peak 17 (Caffeic acid).