

Supporting information

**Analyzing citramalic acid enantiomers in apple and commercial fruit juice
by liquid chromatography–tandem mass spectrometry with pre-column
derivatization**

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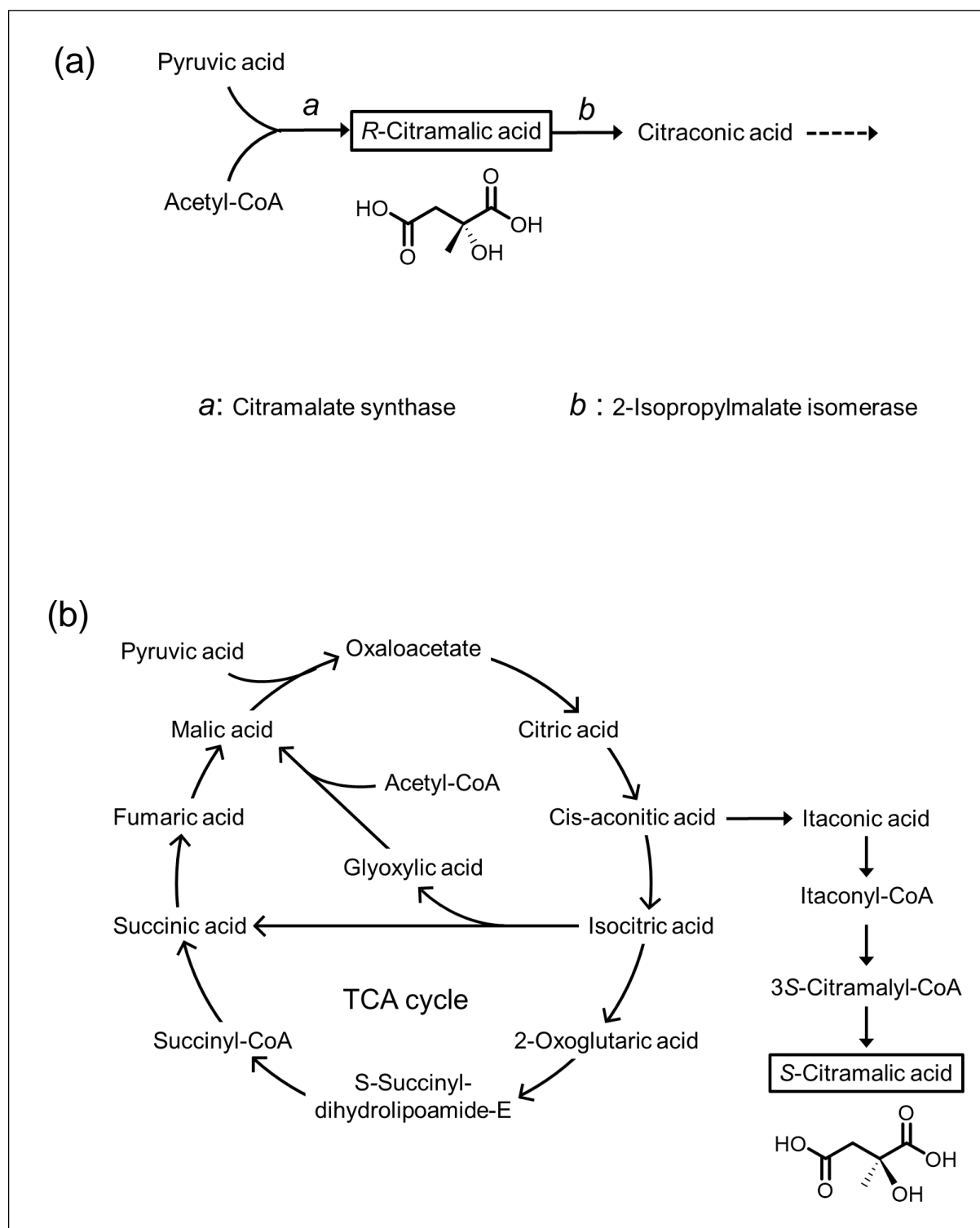
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Scheme S1. Biosynthetic pathways for (a) *R*- and (b) *S*-CMA.

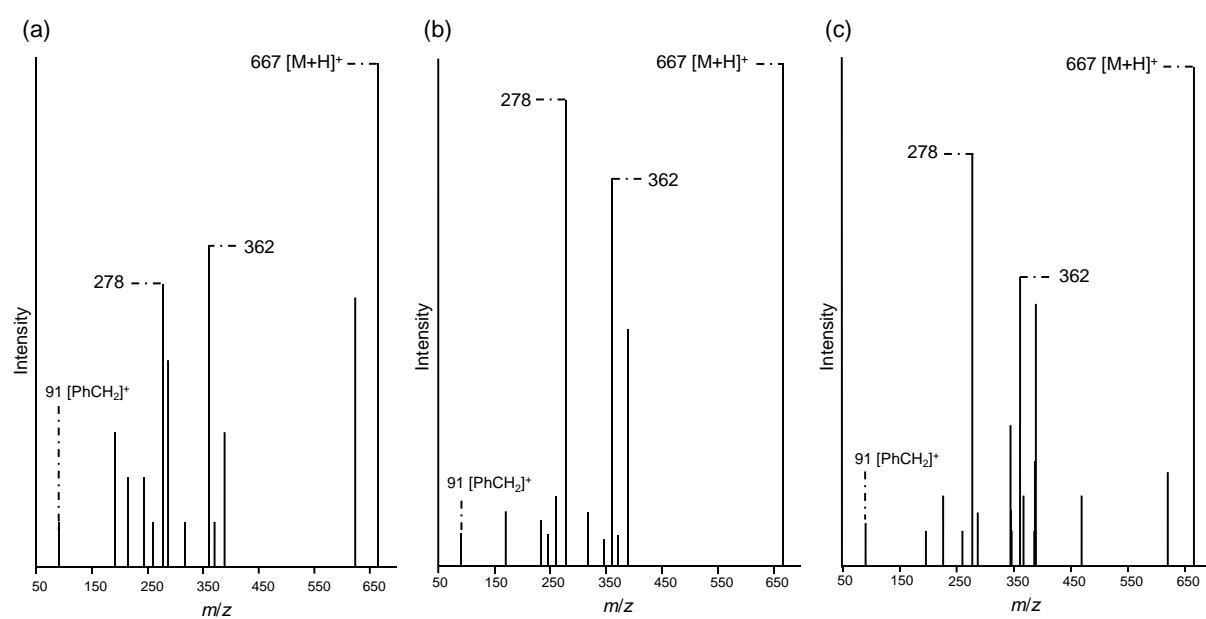


Figure S1. MS/MS spectra of *R*-CMA detected in the samples prepared from apple peel (a), fruit (b), and juice (c).

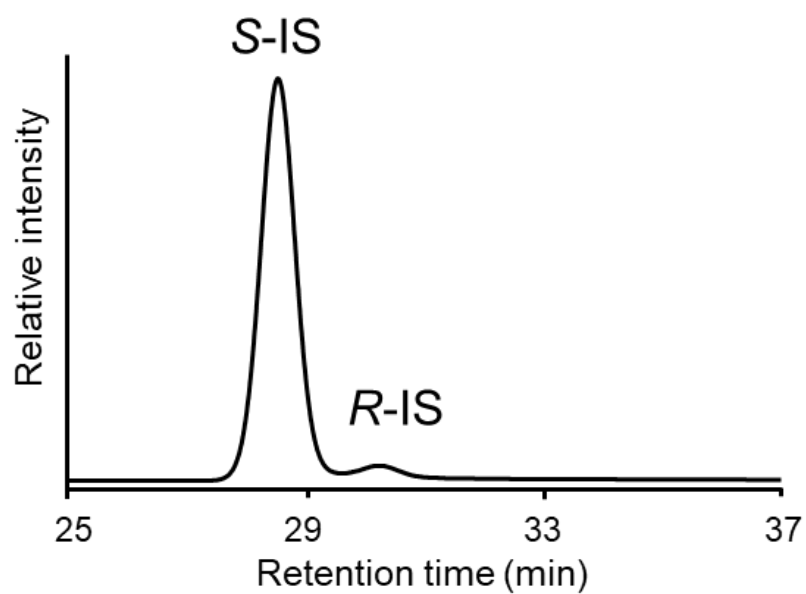


Figure S2. MRM chromatogram of the internal standard (10 μ M sodium D-lactate ($^{13}\text{C}_3$, 98%) and 1.0 mM L-lactate -3,3,3- d_3) used in the present study.