Supporting information

Highly sensitive identification of illegal cooking oil by surface-enhanced Raman spectroscopy combined with acyl nucleophilic substitution reaction to detect capsaicin

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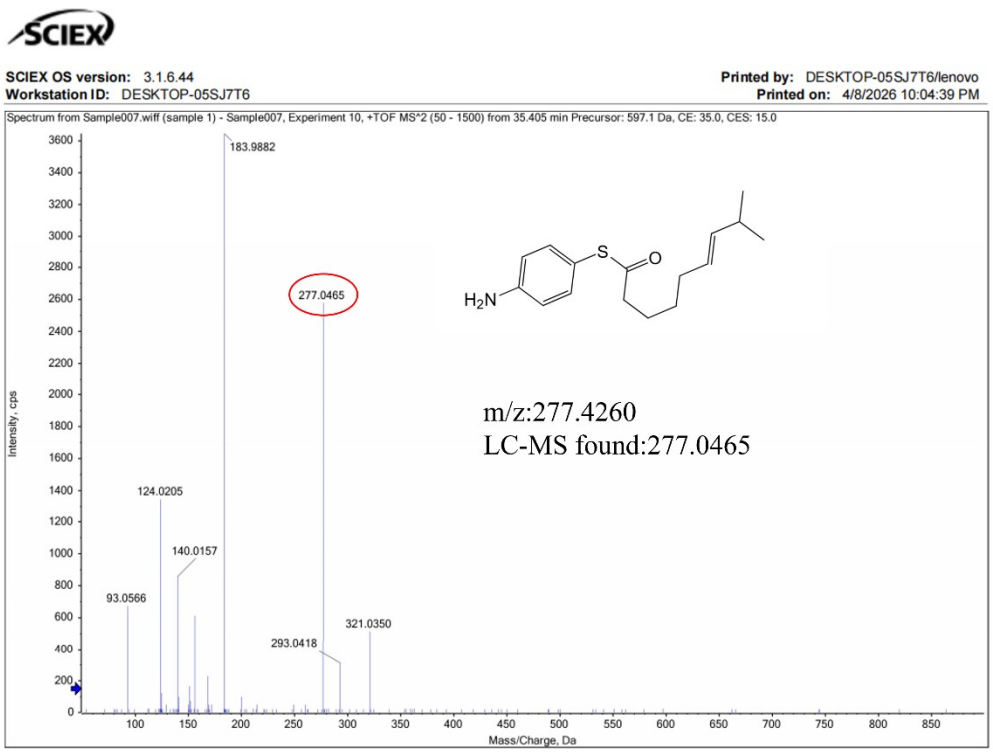

Fig. S1. Mass spectrum of the capsaicin derivatization product

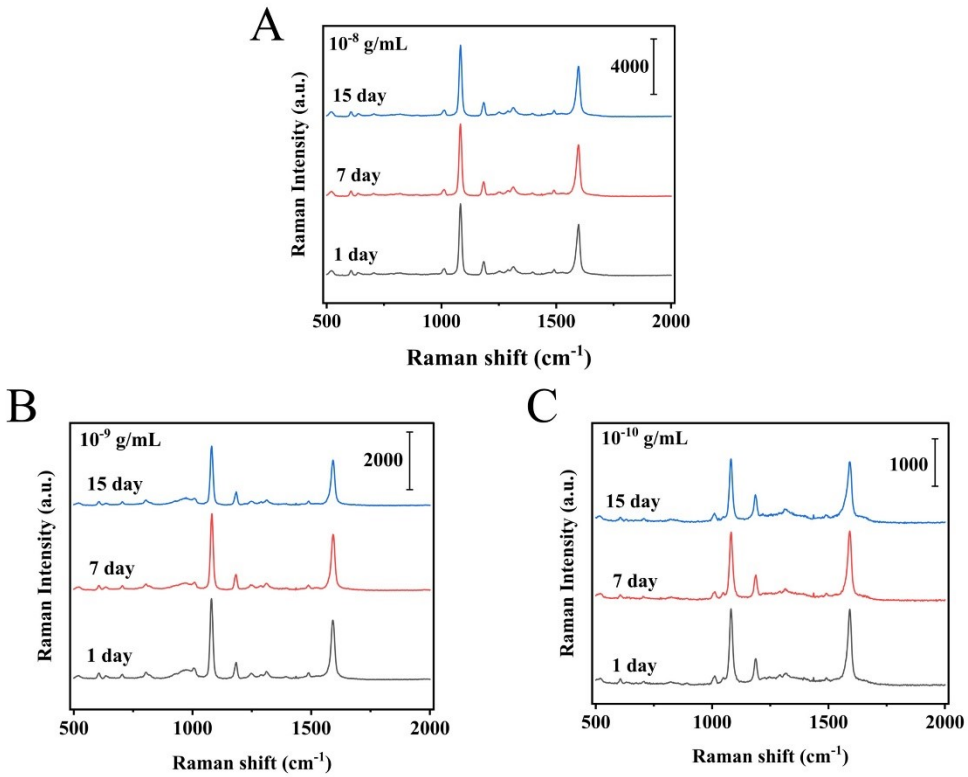

Fig. S2. Raman spectra of the capsaicin derivative at different reaction times: (A) 10^{-8} g/mL; (B) 10^{-9} g/mL; (C) 10^{-10} g/mL (capsaicin concentration).

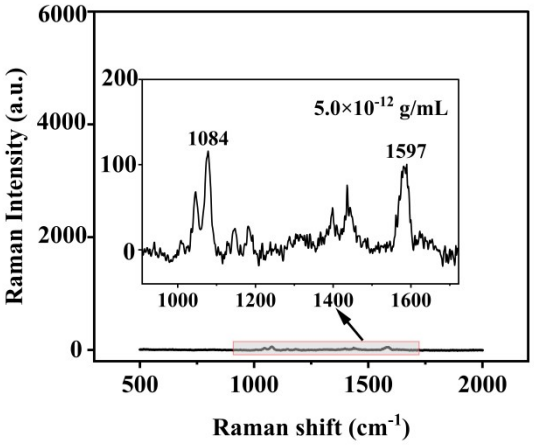

Fig. S3. SERS spectrum of 5.0×10^{-12} g/mL capsaicin in soybean oil matrix.