

Fig. 3 | Total synthesis of sorbicillactone A (7) and C9 analogs. a Chemical synthesis of sorbicillactone ethyl esters (27a/b). b Chemoenzymatic total synthesis of sorbicillactone A (7) and structural analogs 33–36 with different C9 substitutions using SorbC (labeled in yellow).



Fig. 2 | Initial synthetic efforts towards sorbicillactone A. a Initial retrosynthetic approach towards sorbicillactone A (7). b Unsuccessful synthesis of sorbicillactone derivative 17 devoid of the fumaryl side chain. c Chemoenzymatic synthesis of TFA-

protected sorbicillactone derivative **16a** using recombinant SorbC (labeled in yellow). **d** Synthesis of nitrosorbicillactones **21a/b**.