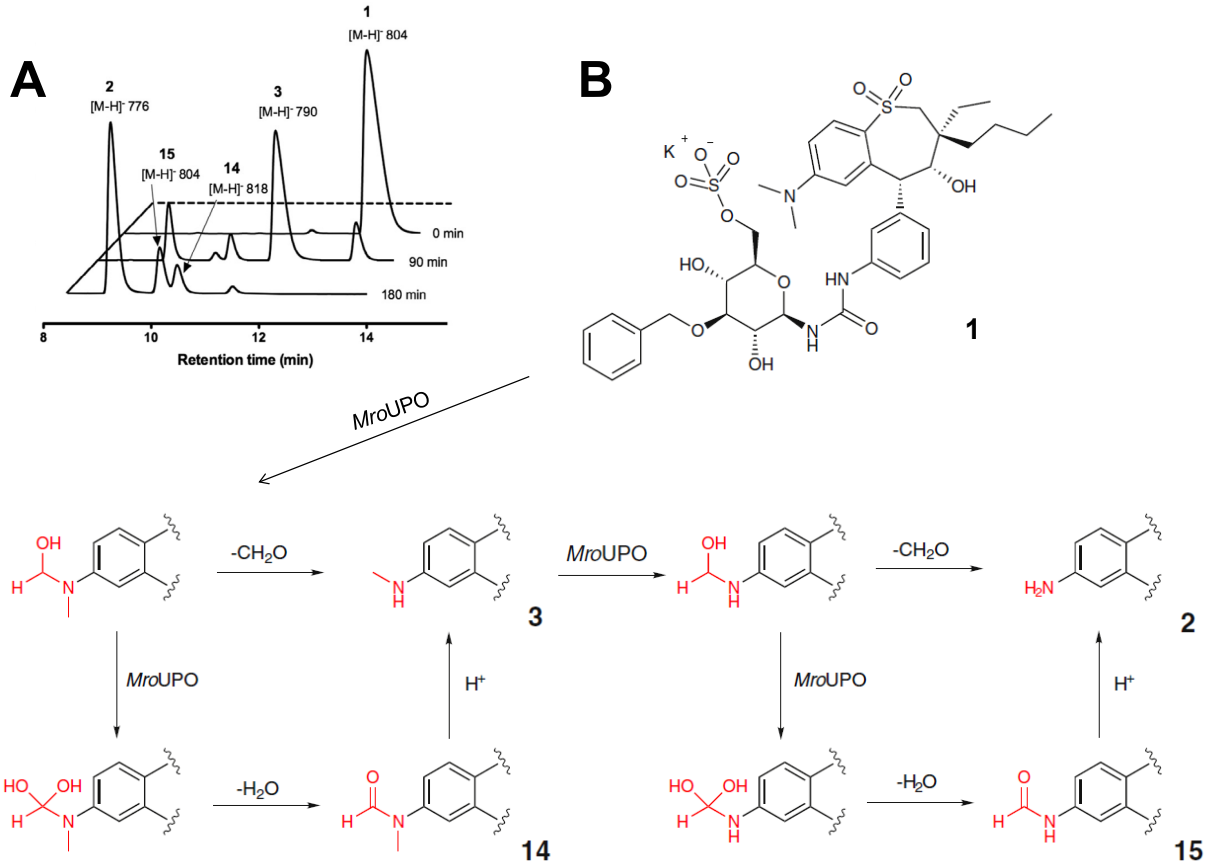

Fig. 11. Synthesis of human metabolites by basidiomycete peroxygenase. A. The bile acid reabsorption inhibitor SAR548304 is N-desmethylated by *Marasmius rotula* UPO, as shown by HPLC analysis at different reaction times. **B.** The postulated *N*-desmethylation mechanism (from 1 to 2) may proceed *via* an unstable hemiaminal intermediate and formation of *N*-formyl derivatives (14 + 15) arising from a geminal alcohol intermediate. Adapted from Kiebist et al. (2015).