

Supplemental Figure S6. Purification and enzyme activity of AtSDR1. A, Gel filtration profile of recombinant AtSDR1 by Mono Q column chromatography reveals that purified AtSDR1 (32 kDa) is a monomeric enzyme in solution. An inset represents the final purity of recombinant AtSDR1 (arrow head) and molecular weight markers. B, Gas chromatographic analyses of monoterpene standards: 1) menthone, 2) camphor, 3) neomenthol, and 4) menthol. C and D, Chromatograms of enzymatic reaction products assayed at pH 8.0 (reduction) and 9.0 (oxidation), respectively. The Y-axis is a detector response unit corresponding to the generated reaction products. E, Effects of pH on enzymatic activity using menthone as a substrate. F, Effects of pH on enzymatic activity using neomenthol as a substrate. Amount of products (Y-axis) is relative %-value when the maximal amount at optimal pH is taken as 100 %.