

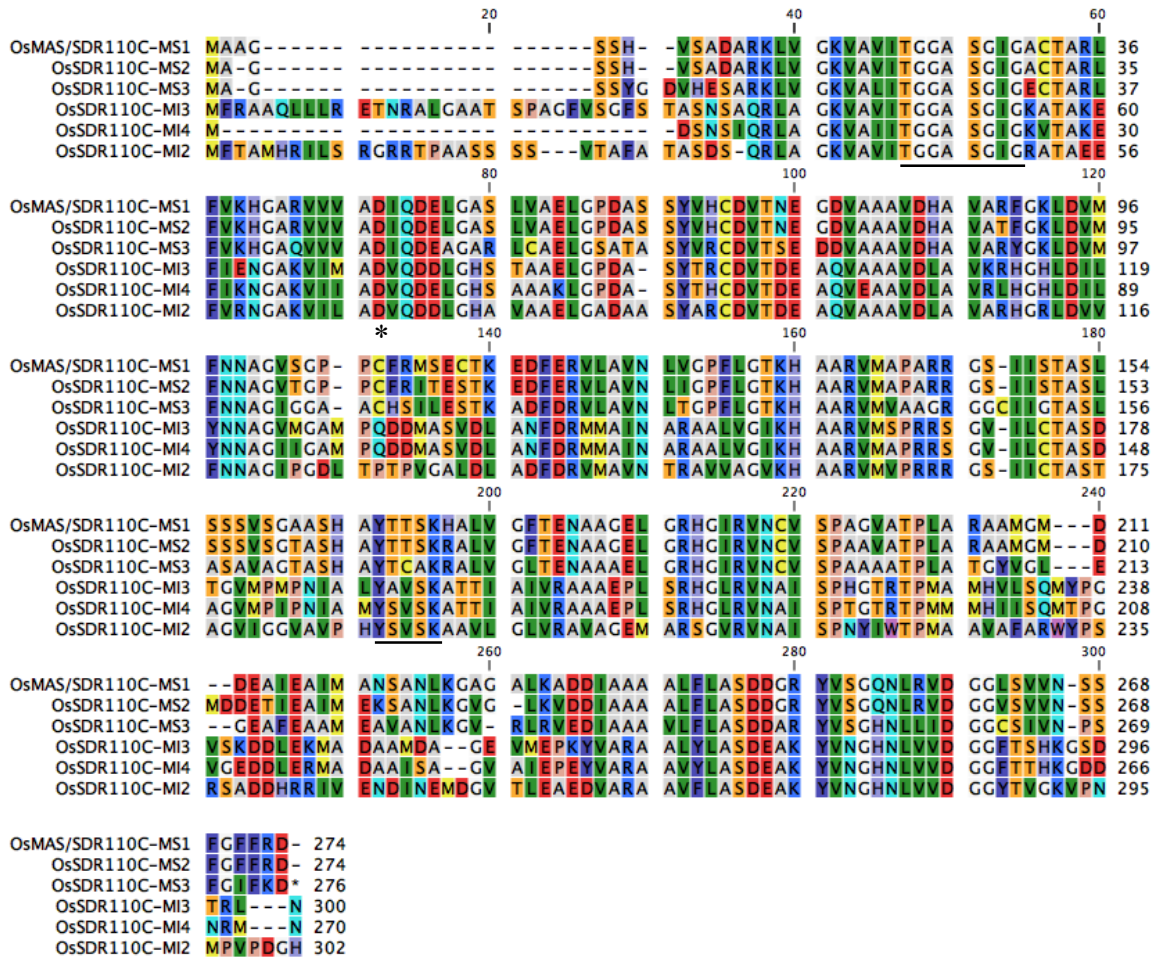
## Supplemental data for:

# Investigating inducible short-chain alcohol dehydrogenases/reductases clarifies rice oryzalexin biosynthesis

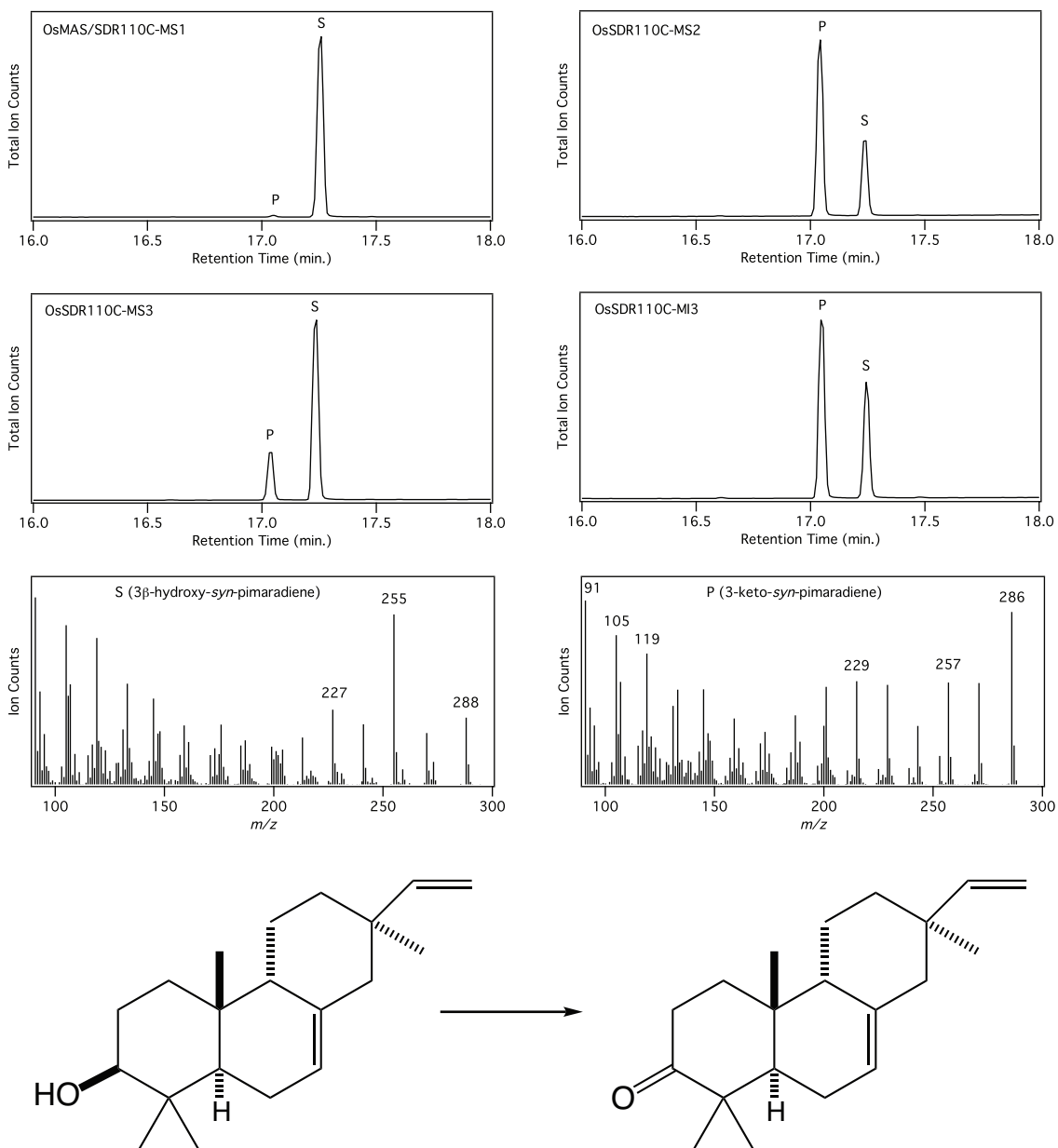
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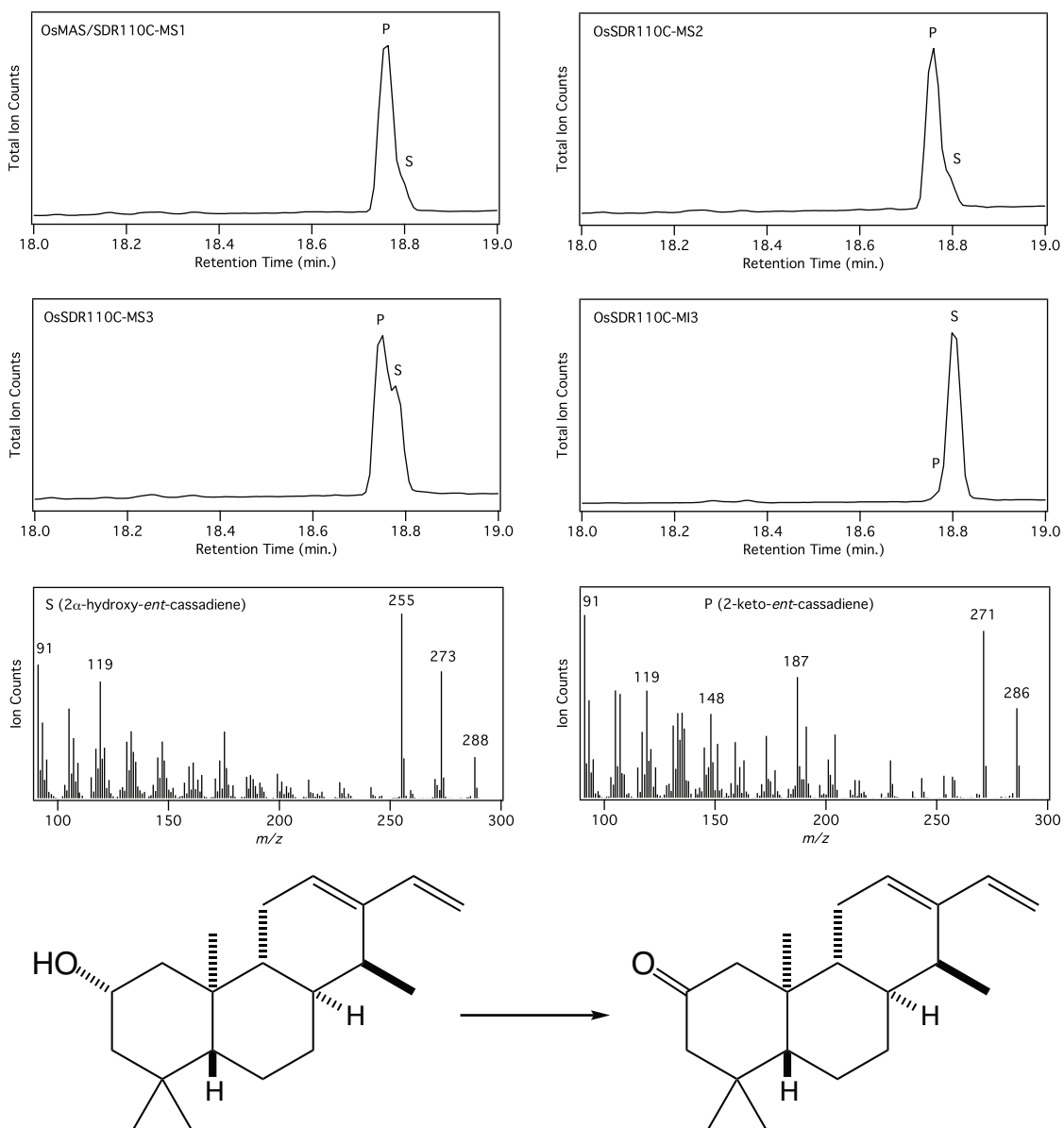
**Figure S1.** Alignment of SDRs investigated in this report. The TGxxxGxG coenzyme binding and catalytic YxxxK motifs are underlined, while the Asp residue indicating the preference for NAD<sup>+</sup> over NADP<sup>+</sup> is indicated by an asterisk. Note that OsSDR110C-MI4 appears to be truncated at the N-terminus relative to the other MI clade members, and may represent a pseudo-gene.



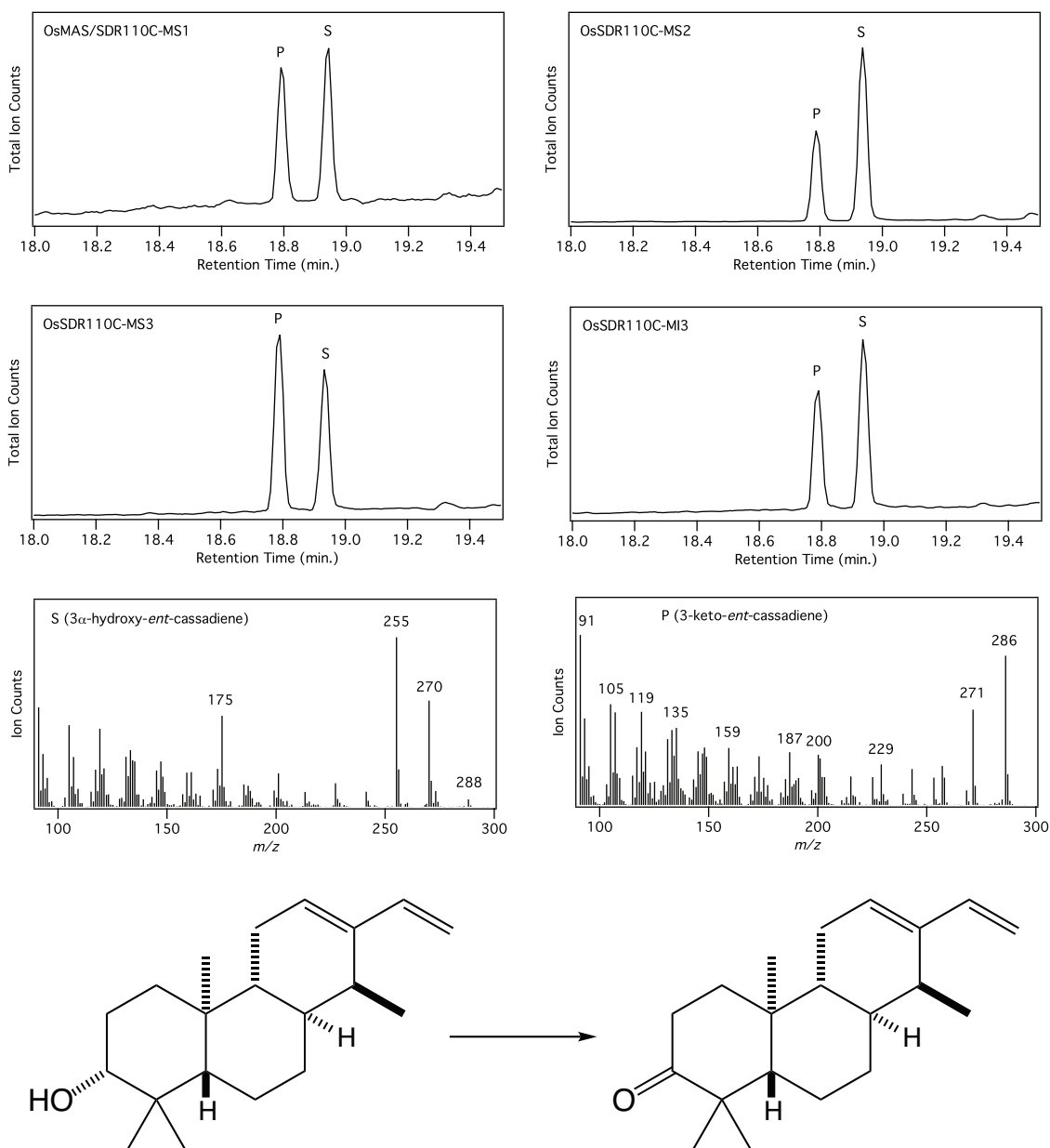
**Figure S2.** SDR activity with the simplified substrate analog 3 $\beta$ -hydroxy-*syn*-pimaradiene. GC-MS chromatograms for each active SDR, mass spectra for the substrate and product, and catalyzed oxidation reaction.



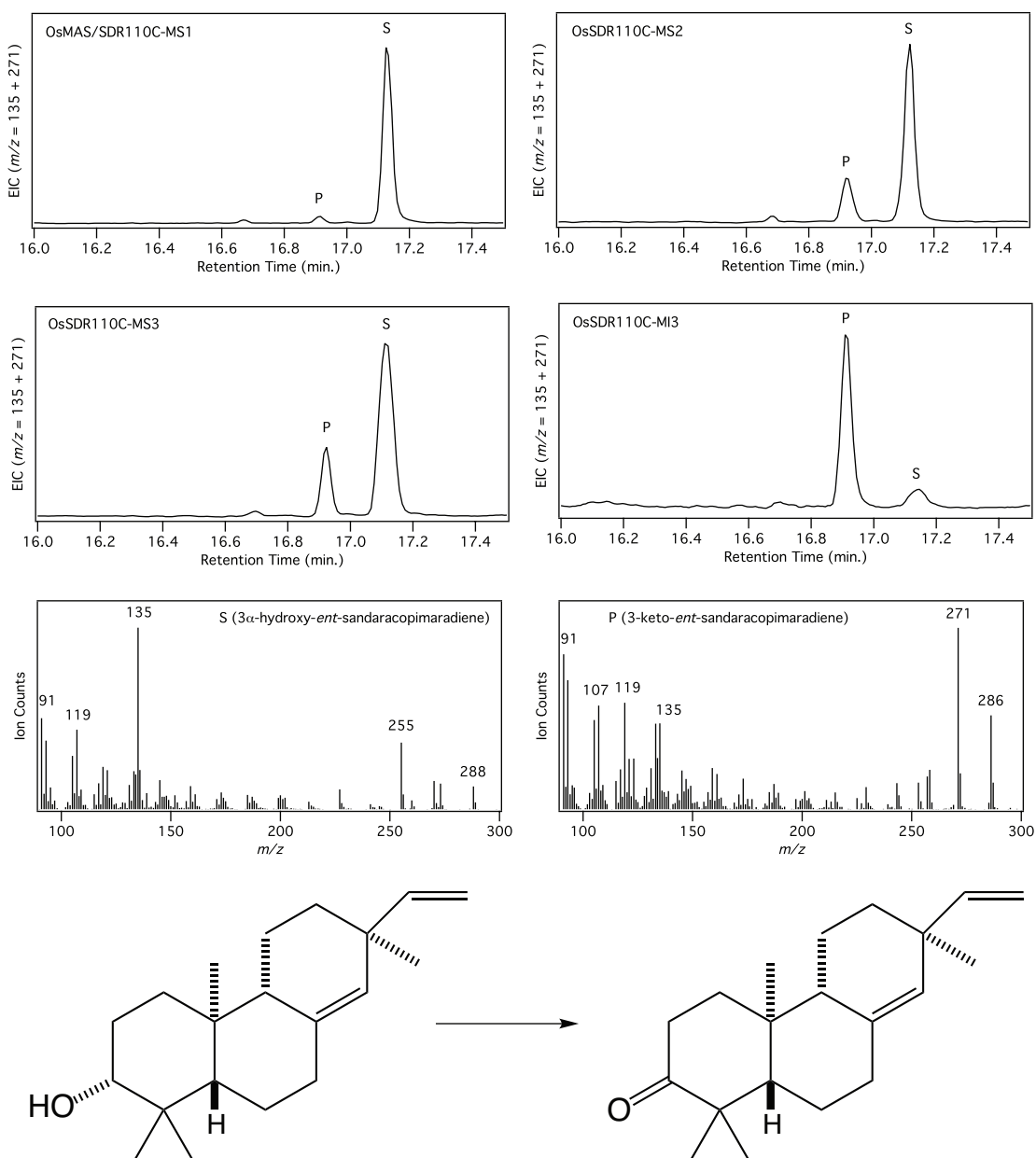
**Figure S3.** SDR activity with the simplified substrate analog  $2\alpha$ -hydroxy-*ent*-cassadiene. GC-MS chromatograms for each active SDR, mass spectra for the substrate and product, and catalyzed oxidation reaction.



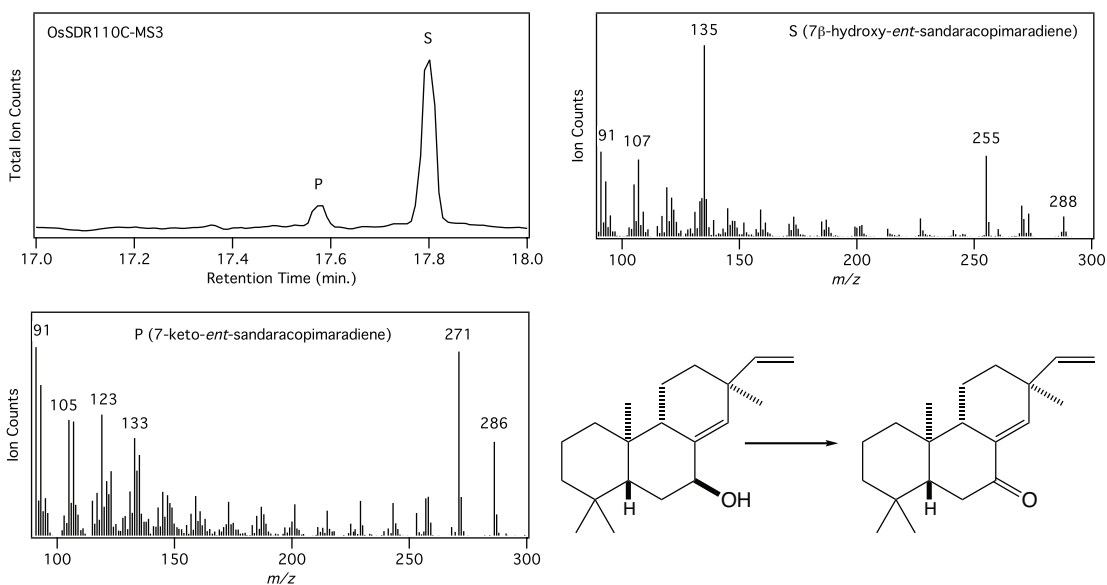
**Figure S4.** SDR activity with the simplified substrate analog 3 $\alpha$ -hydroxy-*ent*-cassadiene. GC-MS chromatograms for each active SDR, mass spectra for the substrate and product, and catalyzed oxidation reaction.



**Figure S5.** SDR activity with the simplified substrate analog 3 $\alpha$ -hydroxy-*ent*-sandaracopimaradiene. GC-MS chromatograms for each active SDR, mass spectra for the substrate and product, and catalyzed oxidation reaction.



**Figure S6.** SDR activity with the simplified substrate analog 7 $\beta$ -hydroxy-*ent*-sandaracopimaradiene. GC-MS chromatograms for the active SDR110C-MS3, mass spectra for the substrate and product, and catalyzed oxidation reaction.



### Sequence of synthetic *OsSDR110C-MS2*

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atggcaggctcctcgcatgtttctgcccagcgtcgtaaactggtgggtaaagtggcagt
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```