

# Recent advances on feasible strategies for monoterpenoid production in *Saccharomyces cerevisiae*

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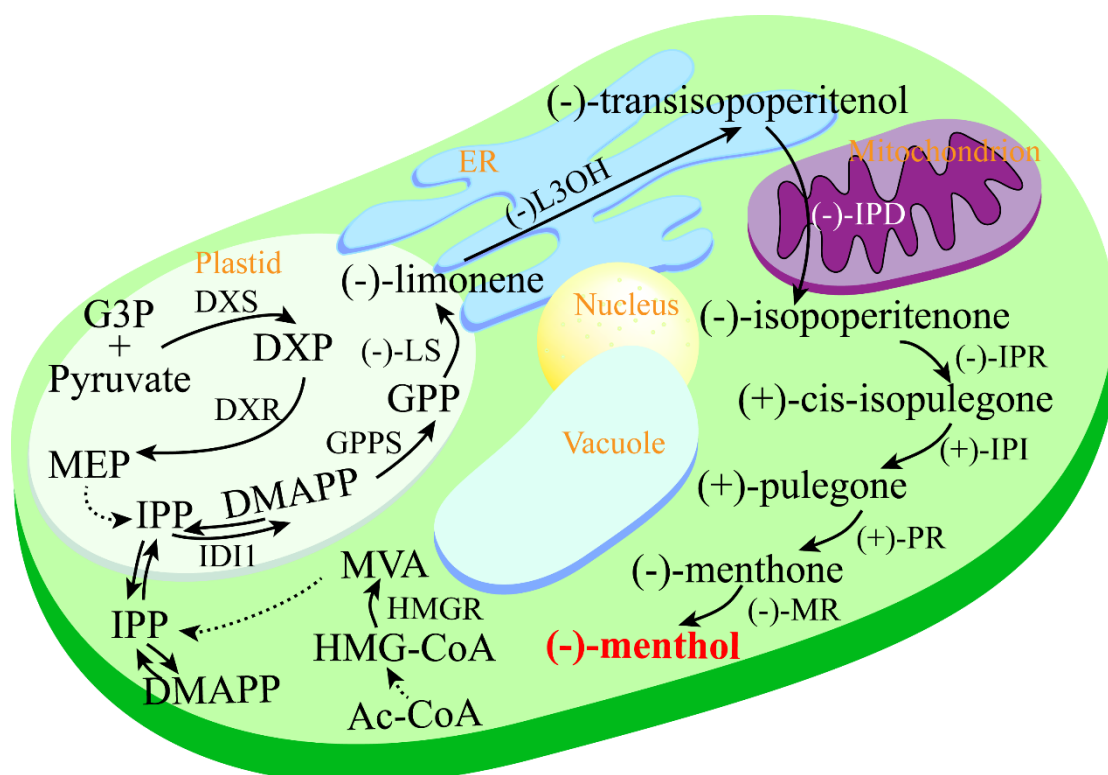
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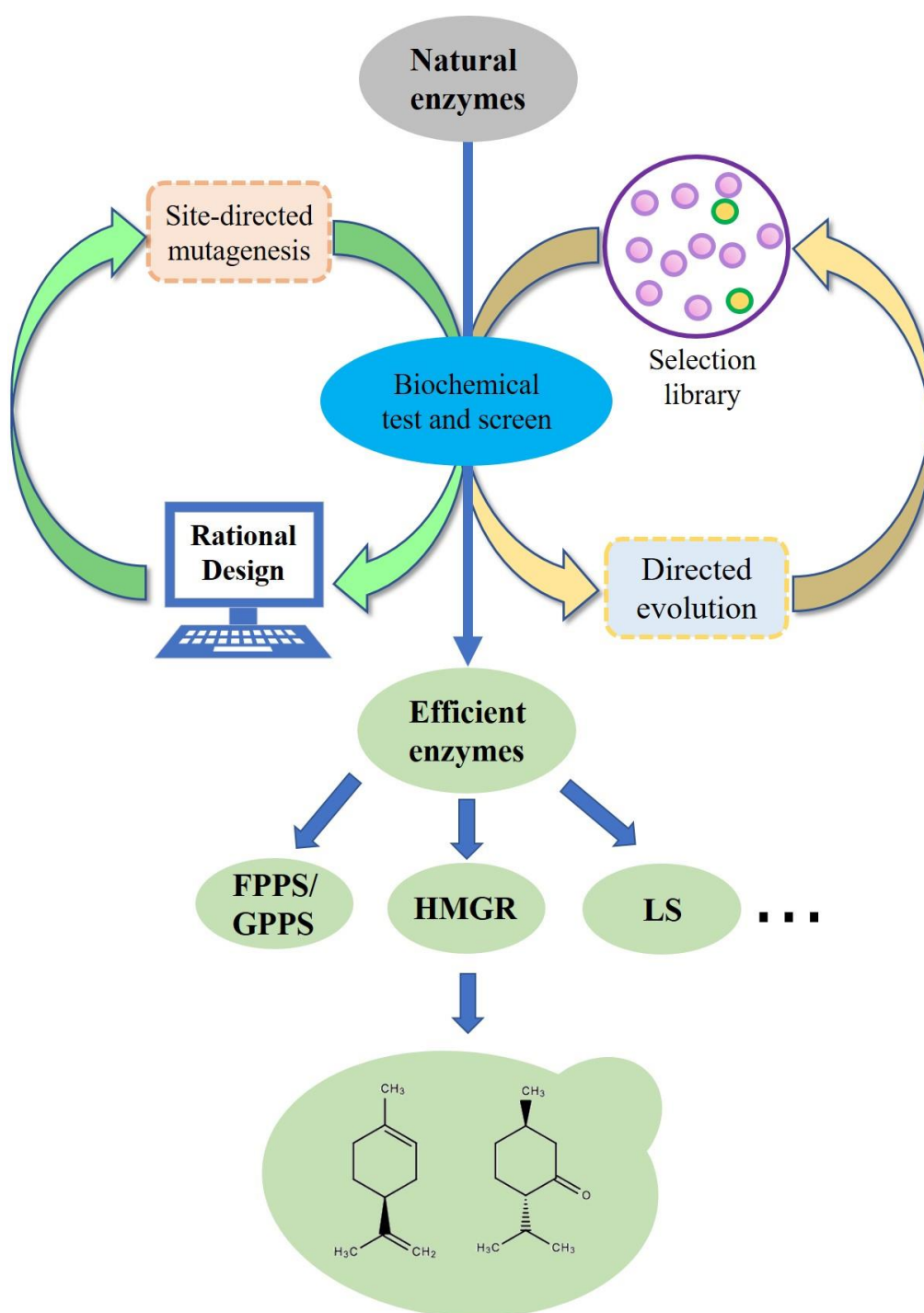
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**Supplementary Figure S1. Representative monoterpene (menthone) biosynthetic pathway in plants.** Ac-CoA, acetyl-CoA; DMAPP dimethylallyl diphosphate; DXP, 1-deoxy-D-xyulose-5-phosphate; DXR, 1-deoxy-D-xylulose 5-phosphate reductoisomerase; DXS, 1-deoxy-D-xylulose 5-phosphate synthase; G3P, glyceraldehyde 3-phosphate; GPP, geranyl diphosphate; GPPS, GPP synthase; HMG-CoA, 3-hydroxy-3-methylglutaryl-CoA; HMGR, 3-hydroxy-3-methylglutaryl-CoA reductase; IDI1, isopentenyl diphosphate isomerase; IPD, trans-isopiperitenol dehydrogenase; IPI, cis-isopulegone isomerase; IPR, isopiperitenoe reductase; L3OH, limonene-3-hydroxylase; LS, limonene synthase; MEP, 2C-methyl-D-erythritol 4-phosphate; MR, menthone reductase; MVA, mevalonate; PR, pulegone reductase.



### Efficient monoterpene biosynthetic pathway

**Supplementary Figure S2. Protein engineering for efficient enzyme screening.** The two main strategies of rational design and directed evolution were used for protein engineering until efficient enzymes were obtained. The efficient enzymes may comprise efficient biosynthetic pathway for terpenoid production.