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Biosynthesis of adipic acid via microaerobic hydrogenation of *cis,cis*-muconic acid by oxygen-sensitive enoate reductase

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Highlights

- Construct a novel biosynthetic pathway of adipic acid via reduction of *cis,cis*-muconic acid
- Employ an oxygen-sensitive enoate reductase for reducing *cis,cis*-muconic acid under microaerobic condition
- Engineer a co-culture system to improve adipic acid production
- Employ *Vitreoscilla* hemoglobin for balancing different oxygen demands of strains in co-culture system

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