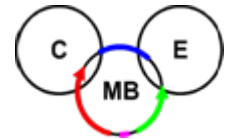




# Sequestration of Carbon Dioxide with Simultaneous Production of Succinic Acid by Metabolically Engineering *Escherichia coli*

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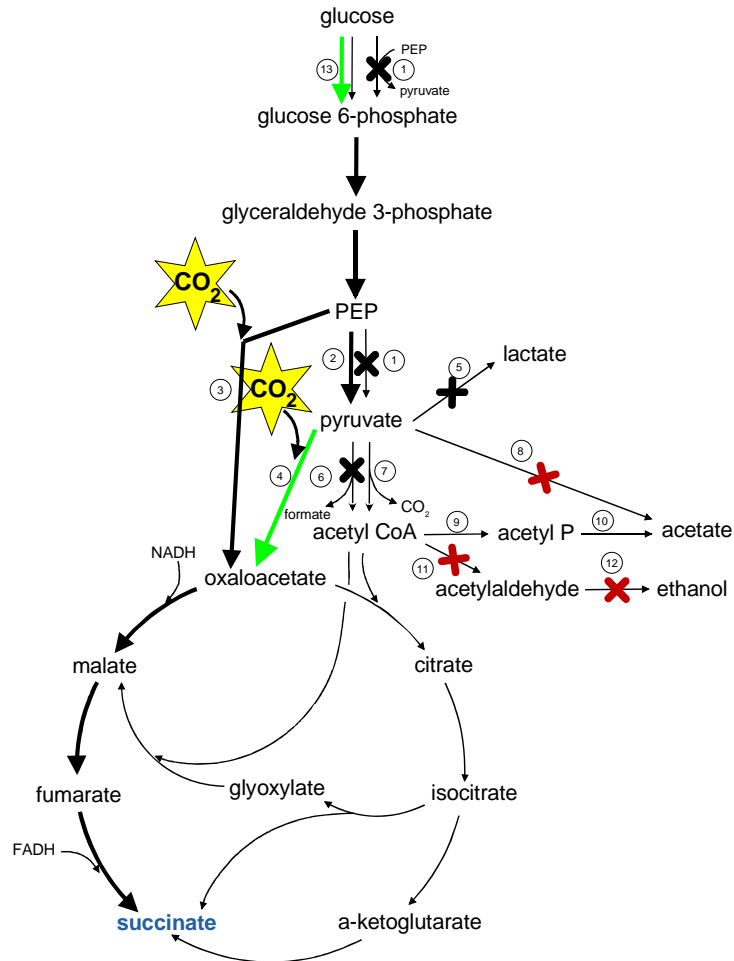


What characteristics should a biological process to “sequester” CO<sub>2</sub> have?

1. have a high rate of CO<sub>2</sub> utilization.
2. generate a co-product.
3. be able to use readily available sources of CO<sub>2</sub>.

**Prof. Mark A. Eiteman**

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- How fast can CO<sub>2</sub> be utilized?
- What conditions are necessary for cell growth/CO<sub>2</sub> utilization?
- How long can succinate production/CO<sub>2</sub> utilization be extended?
- Can gases with a lower concentration of CO<sub>2</sub> including flue gas (containing about 15% CO<sub>2</sub> but also CO, O<sub>2</sub>, NO<sub>x</sub> and SO<sub>x</sub>) be used directly for this process?