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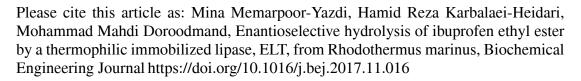
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ACCEPTED MANUSCRIPT

Enantioselective hydrolysis of ibuprofen ethyl ester by a thermophilic immobilized lipase, ELT, from *Rhodothermus marinus*

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Highlights

- A novel enantioselective lipase from Rhodothermus marinus has been cloned and overexpressed.
- The purified lipase (ELT) was immobilized on chitosan-MMPs and SiO₂ nanoparticles.
- The ELT-SiO₂ showed remarkable kinetic parameters.
- Immobilized enzymes were used as biocatalyst to obtain S-enantiopure of ibuprofen.
- Enantioselective ratio and conversion percent of the immobilized ELT were 3.0 and 43%.

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