

Enzyme Data

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| BCC-Nr. | 064 |
| Enzyme | Lipase |
| EC-No. | 3.1.1.3 |
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| T_{opt} | 25°C (recommended 10-35°C), still active at 0°C |
| pH_{opt} | 7 (recommended 6-9) |
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| Stability | no significant stability at temperatures >15°C!!! |
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| Activity and substrate specificity | <ul style="list-style-type: none">- highest activity with long-chain substrates (C10-C18)- converts (R)-Ibuprofen esters (ee>91%, E 55)- converts:<ul style="list-style-type: none">- pNP-2- (4-isobutylphenyl) propanoate (ibuprofen)- pNP-2- phenyl-propanoate- pNP-3-phenyl butanoate- pNP-cyclohexanoate- pNP-2-(6-methoxynaphthalene-2-yl-) propanoate (naproxen)- octylacetate- phenylacetate- β-citronolloyl acetate- -2,3-dibutoxypropyl acetate- specificity for esters of primary alcohols |
| Additives | <ul style="list-style-type: none">- requires at least 1-5 mM Ca²⁺ for full activity- inhibited by Fe²⁺/Fe³⁺ and Cu²⁺ |