

Enzyme Data

BCC-Nr.	030
Enzyme	Esterase
EC-No.	3.1.1.1
T_{opt}	25°C (recommended 10-30°C)
pH_{opt}	8 (recommended 7-9)
Stability	t _{1/2} (40°C) = 5 h, no significant stability >50°C
Activity and substrate specificity	<ul style="list-style-type: none">- 2 U/mg, K_M 0.51 mM(pNP-butyrate)- converts substrates up to C8- converts<ul style="list-style-type: none">- pNP-2- (4-isobutylphenyl) propanoate (ibuprofen)- pNP-benzoate- pNP-1-naphtoate- pNP-cyclohexanoate- pNP-2-(6-methoxynaphthalene-2-yl-) propanoate (naproxen)- pNP-2-phenylpropanoate- pNP-3-phenylbutanoate- pNP-2-(3-benzoylphenyl)propanoate- no activity on triacylglycerols
Additives	<ul style="list-style-type: none">- inhibited by Al²⁺, Cu²⁺, Fe²⁺, Ni²⁺, Cr²⁺, Co²⁺- inhibited by Pefablock, PMSF, DTT, EDTA and Tween20- no significant activity in solvents (except DMSO (50% v/v))