

Cutinase 2P

EC 3.1.1.74

- Beschreibung:** Enzympräparat zur Hydrolyse von Cutin und anderen Estern. Cutin (Polyester aus Hydroxy- und Hydroxy-Epoxyfettsäure) wird in die entsprechenden Monomere gespalten.
- Anwendung:** Spaltung von Cutin; organische Synthese (s. Tab. 1)
- Herkunft:** *Arxula adenivorans*
- Aktivität:** 20.000 U/g (pH 7,0; 37°C; Glycerintributyrat als Substrat)
- Reaktionsparameter:** pH-Wert Optimum: 4 - 6 aktiv im Bereich pH 3,5 - 8
Temperatur Optimum: 20 - 40°C aktiv im Bereich 5 - 60°C
- Bestell-Nr.:** 2465
- Lieferform:** teilgereinigtes Lyophilisat
- Lagerung:** -20°C
- Haltbarkeit:** 12 Monate unter o.g. Bedingungen

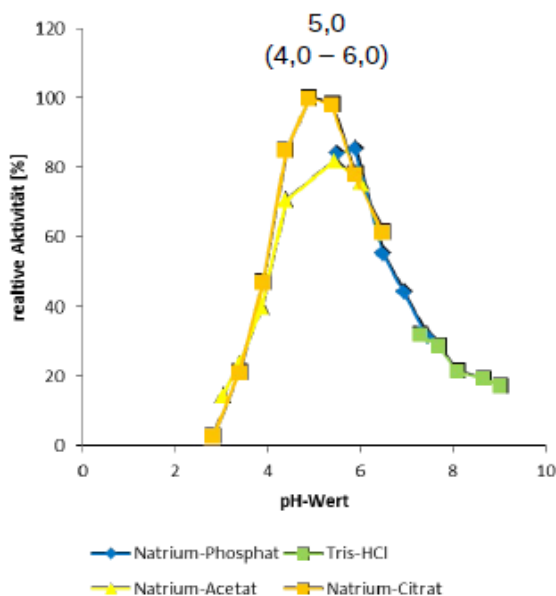


Abb. 1: pH-Abhängigkeit der Cutinase 2P

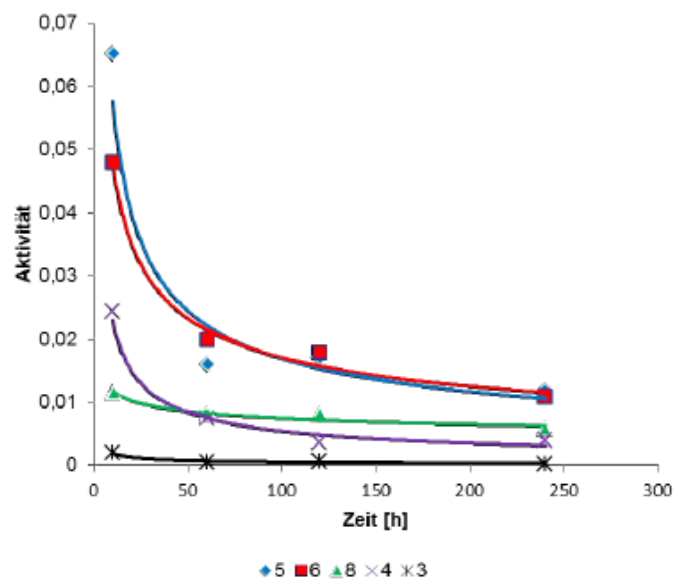


Abb. 2: pH-Stabilität der Cutinase 2P

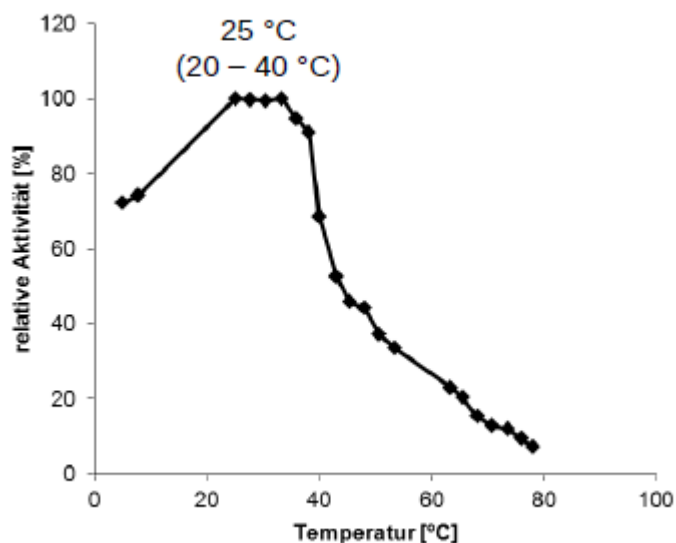


Abb. 3: Temperatur-Abhängigkeit der Cutinase 2P

Tab. 1: Einsatz von Cutinasen in der Biokatalyse (nach Carvalho et al., 1998b)			
Reaktion	Substrat	Enzympräparation/Reaktionsansatz	Referenz.
Hydrolyse	Triolein	Reverse Micellen AOT/Isoktan	Melo et al., 1995b
		Triolein/Wasser	Flipsen et al., 1996
	Tricaprylin	Immobilisierung an Zeolithen	Gonçalves et al., 1996a
		Calciumalginat	Gonçalves et al., 1995
		Kovalente Bindung an porösem Silicat	Gonçalves et al., 1996b
	p-nitrophenyl valerat	Micellen mit SDS/Triton X100	Pocalyko and Tallman, 1998
	p-nitrophenyl palmitat	Immobilisierung an Dextran und Silica-Derivate	Gonçalves et al., 1998a
Methyl-,ethyl-, propylpropionat	Gas/Festphasensystem	Lamare et al., 1997	
Estersynthese	Ölsäure+Hexanol	Reverse Micellen AOT/Isoktan	Sebastião et al., 1993, Sebastião et al., 1992
	Caprylsäure + Butanol	Organische Lösungsmittel	Sarazin et al., 1992, Sarazin et al., 1995
	Caprylsäure + Butanol	Organische Lösungsmittel	Sarazin et al., 1992, Sarazin et al., 1995
	Buttersäure + 2-Butanol	Phosphatidylcholin/ Isoktan, Reverse Micellen	Pinto-Sousa et al., 1994

	Ölsäure + Glycerin	Organische Lösungsmittel	Melo et al., 1995a
	Hexansäure + Hexanol	CTAB, Reverse Micellen	Cunnah et al., 1996
		Immobilisierung an Accurel EP 100	Sereti et al., 1997
	Buttersäure + Hexanol	Immobilisierung an Accurel EP 100	Sjursnes et al., 1998
	Laurinsäure + Pentanol	Reverse Micellen AOT/Isoktan	Papadimitriou et al., 1996
Umesterung	Methylpropionat+Propanol	Gas/Festphasensystem	Lamare and Legoy, 1995, Lamare et al., 1997
		Reverse Micellen AOT/Isoktan	Carvalho et.al 1997a, Carvalho et al., 1998a
	Butylacetat+Hexanol	Reverse Micellen CTAB/Isoktan	Cunnah et al., 1996
		Immobilisierung an Zeolithen	Serralha et al., 1998

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