

Title (en)

SIMPLE ENZYMATIC PROCESS FOR PREPARING CEFAZOLIN

Title (de)

EINFACHES ENZYMATISCHES VERFAHREN ZUR HERSTELLUNG VON CEFALAZOLIN

Title (fr)

PROCEDE ENZYMATIQUE SIMPLE DE PREPARATION DE CEFAZOLINE

Publication

EP 1556500 A1 20050727 (EN)

Application

EP 03773688 A 20031030

Priority

- EP 03773688 A 20031030
- EP 0312165 W 20031030
- EP 02380224 A 20021031

Abstract (en)

[origin: EP1416054A1] Preparing cefazolin (A) involves acylating 7-amino-3-[(methyl-1,3,4-thiadiazol-2-yl)thiomethyl]-3-cephem-4-carboxylic acid with tetrazole containing acetic acid in the presence of biocatalyst containing penicillin amidase at pH of 6-8 and at -20 - 40 [deg]C; and precipitating (A) by adding an acid to lower the pH below 3.5 at 0-20 [deg]C. Preparing cefazolin (A) involves acylating 7-amino-3-[(methyl-1,3,4-thiadiazol-2-yl)thiomethyl]-3-cephem-4-carboxylic acid (I) or its salt with tetrazole containing acetic acid of formula (II) in the presence of biocatalyst containing penicillin amidase (EC 3.5.1.11) (100 - 50000 units per liter) at pH of 6 - 8 and at -20 - 40 (preferably 0 - 10)[deg]C; and precipitating (A) by adding an acid to lower the pH below 3.5 at 0 - 20[deg]C. [Image] R : ester or amide of the acid. ACTIVITY : Antibiotic. No biological data is given. MECHANISM OF ACTION : None given.

IPC 1-7

C12P 35/04; **C12N 9/84**; **C07D 501/36**

IPC 8 full level

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