

Title (en)

IMPROVED PROCESS FOR PRODUCTION OF CLAVULANIC ACID

Title (de)

VERBESSERTES VERFAHREN ZUR HERSTELLUNG VON CLAVULANSÄURE

Title (fr)

PROCÉDÉ DE PRODUCTION D'ACIDE CLAVULANIQUE

Publication

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Application

**EP 21749793 A 20210723**

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Abstract (en)

[origin: WO2022018258A1] The present invention relates to a process for the preparation of the  $\beta$ -lactamase inhibitor clavulanic acid by using a microorganism, comprising a step of targeted modifying said microorganism. The present invention is further directed to a process for preparing clavulanic acid by using a microorganism being capable of producing clavulanic acid, but at the same time exhibits reduced or no production of teleocidin A and/or congeners originating from the teleocidin biosynthetic pathway; to a process for preparing clavulanic acid by using a microorganism being capable of producing clavulanic acid, with this process comprising a step of testing said microorganism as to whether it is capable of producing clavulanic acid, but at the same time exhibits reduced or no production of teleocidin A, and/or other congeners originating from the teleocidin biosynthetic pathway; and to a method of testing the suitability of a strain of *S. clavuligerus* for being used in the production of clavulanic acid, this method comprising a step of assessing whether said strain produces teleocidin A and/or other congeners originating from the teleocidin biosynthetic pathway. The present invention further relates to a method of testing whether a culture broth that is used for culturing *S. clavuligerus* and producing clavulanic acid has low toxicity, comprising a step of detecting the presence or absence of teleocidin A in said culture broth. Finally, the present invention relates to *S. clavuligerus* that produces clavulanic acid but reduced or no teleocidin A and/or other congeners originating from the teleocidin biosynthetic pathway.

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