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(54) **DNA SEQUENCE ENCODING PENICILLIN ACYLASE, NOVEL RECOMBINANT RECOMBINANT DNA CONSTRUCTS AND RECOMBINANT MICROORGANISMS**

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(57) **ABSTRACT**

The invention consists in a nucleotide sequence having the size of (2646) bp, wherein the order of nucleotides is identical to the order of the nucleotide sequence encoding penicillin acylase from *Achromobacter* sp. CCM 4824 (formerly *Comamonas testosteroni* CCM 4824), eventually of the fragments of this sequence having the length of at least 150 nucleotides. The sequence can be used in the formation of a DNA construct, eventually the construct having at least one regulatory sequence regulating the expression of the gene and the production of a polypeptide with the penicillin acylase activity. The sequence can form part of a recombinant expression vector, which consists of the above-mentioned construct, promoter, translational start signal, translational and transcriptional stop signal. Further, the invention concerns a recombinant host cell, containing the nucleic acid construct carried by the vector or integrated into the cell chromosome, and the *E. coli* BL21 strain containing said sequence of the nucleotides encoding the penicillin acylase carried in the pKXIP1, the pKLP3 or the pKLP6 plasmid.

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