

Title (en)
METHOD AND DEVICE FOR CELL LYSIS

Title (de)
VERFAHREN UND ANLAGE FÜR ZELLYSE

Title (fr)
PROCEDE ET DISPOSITIF DE LYSE CELLULAIRE

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Application
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Priority
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Abstract (en)
[origin: FR2773818A1] Continuous method of lysis of bacteria comprises mixing bacterial liquid and a lysis reagent and immediately pouring the mixture into a pipe. The pipe has a constant flux, where the flow of the flux is adapted, as a function of the diameter and the length of the pipe, to give a homogeneous bacterial lysate upon exiting the pipe. Independent claims are also included for: (1) a method of extracting and purifying nucleic acids, especially plasmids, from a bacterial suspension, by a lysis method as above, followed by neutralization at a second determined point in the process to precipitate or flocculate undesirable cellular components, the duration being determined by the distance separating the lysis and neutralization and by the rate of flux over this distance; (2) a device for carrying out the above processes comprising a pipe (3) for forming a flow of bacterial suspension, a pipe (5) for forming a flow of lysing agent from an alkaline source of lysing agent such as a reservoir (4), these two pipes merging at a point (6). There is also a third small diameter pipe (7) of predetermined length which extends from the aforementioned point, as well as means such as a pump (13) to create a flow in the pipes, the length, the diameter and the flow of the third pipe being such that they give a homogeneous mixture leading to the formation of a homogeneous lysate.

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