

Title (en)  
PROCESS TO DETECT TOXIC SUBSTANCES IN THE ENVIRONMENT

Title (de)  
METHODE ZUR BESTIMMUNG TOXISCHER SUBSTANZEN

Title (fr)  
PROCEDE SERVANT A DETECTER DES SUBSTANCES TOXIQUES DANS L'ENVIRONNEMENT

Publication  
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Application  
**EP 98945188 A 19980808**

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Abstract (en)  
[origin: WO9909202A1] The process according to the invention includes the stages consisting in: placing in an environment to be biomonitored, like air, water, ground, food, clothes, etc., a biosensor consisting in wild type or genetically engineered Dictyostelium cells in conditions apt to development; leaving the cells for 20 hr in the same environment; evaluate the change in morphology of the cell aggregates or the expression of a reporter gene during development. The biosensor for carrying out the process consists of Dictyostelium cells of wild type or transformed with a plasmid containing the gene for a reporter protein. The gene is fused to control elements specific for different Dictyostelium genes, so that the reporter gene is expressed and the reporter protein is synthesised in strains transformed with different plasmids at different times of development, only when the specific regulatory sequences each plasmid contains are activated. The presence of the reporter protein can be detected by naked eye.

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