

Title (en)

METHOD FOR ISOLATING MUTANT CELLS.

Title (de)

ISOLIERUNGSVERFAHREN FÜR MUTANTE ZELLEN.

Title (fr)

PROCEDE D'ISOLEMENT DES CELLULES MUTANTES.

Publication

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Application

**EP 91913873 A 19910620**

Priority

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Abstract (en)

[origin: WO9119799A1] A method for isolating a mutant cell that secretes a desired compound at a level greater than the starting cell from which the mutant cell is derived. The method includes providing a starting cell and a feeder cell. The starting cell has at least three characteristics. First, the starting cell has a requirement for a metabolite for survival or division of the starting cell in a solid growth medium. Second, the starting cell mutates to lack that requirement at a frequency of less than 10<-10> per cell division. Third, the starting cell has a rate of mutation of at least 10<-6> per nucleotide base per cell division. The feeder cell has at least two properties. First, the feeder cell requires the desired compound for survival or division of the feeder cell in a growth medium. Second, the feeder cell secretes the metabolite required by the starting cell into the solid growth medium. The method further includes contacting a plurality of the feeder cells and the starting cells together in a solid growth medium to allow the feeder cells to produce the desired compound and the starter cells to produce the metabolite. Both the cells will grow and divide to produce a plurality of colonies. Those colonies which are largest include one or more mutant cells.

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