

Title (en)
SOLID PHASE METHODS FOR POLYNUCLEOTIDE PRODUCTION

Title (de)
FESTPHASENVERFAHREN ZUR POLYNUKLEOTIDPRODUKTION

Title (fr)
PROCEDE DE PRODUCTION, EN PHASE SOLIDE, DE POLYNUCLEOTIDES

Publication
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Application
EP 04809957 A 20041013

Priority

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- US 51177003 P 20031015
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Abstract (en)
[origin: WO2005037850A2] Polynucleotides having in excess of 1,000 nucleotides can be prepared using a solid phase synthesis technique. A feature of the technique is the use of a reusable solid support that contains covalently bound oligonucleotide. This covalently bound oligonucleotide is annealed to a bridge oligonucleotide, where the bridge is also annealed to a first oligonucleotide that forms a portion of the target polynucleotide. After the target polynucleotide is synthesized, it can be removed from the solid support under denaturing conditions, and the solid support re-used to prepare additional target polynucleotides. The yield of the target polynucleotide increases when shearing force is applied to the solid support that is linked to the growing oligonucleotide. This shearing force is thought to extend the growing end of the oligonucleotide away from contact with other oligonucleotide bound to the solid support and make that end more accessible to annealing with solution oligonucleotide. The synthesis is conveniently accomplished on a porous frit, where reagents and washing solutions are pumped through the frit.

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C07H 21/00

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Citation (search report)
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