



US005124316A

United States Patent [19]

[11] Patent Number: **5,124,316**

Antoniades et al.

[45] Date of Patent: **Jun. 23, 1992**

[54] **METHOD FOR PERIODONTAL REGENERATION**

[75] Inventors: **Harry N. Antoniades**, Newton; **Samuel E. Lynch**, Jamaica Plain, both of Mass.

[73] Assignees: **President and Fellows of Harvard College**, Cambridge; **Institute of Molecular Biology, Inc.**, Boston, both of Mass.

[21] Appl. No.: **582,332**

[22] Filed: **Sep. 13, 1990**

Related U.S. Application Data

[63] Continuation of Ser. No. 299,763, Jan. 23, 1989, abandoned, which is a continuation-in-part of Ser. No. 234,196, Aug. 18, 1988, abandoned, which is a continuation-in-part of Ser. No. 120,606, Nov. 16, 1987, abandoned, which is a continuation-in-part of Ser. No. 930,762, Nov. 14, 1986, abandoned.

[51] Int. Cl.⁵ **A61K 37/02; A61K 7/16**

[52] U.S. Cl. **514/12; 514/21; 514/2; 424/49; 604/54; 604/46; 604/77**
[58] Field of Search **514/2, 3, 21, 12; 424/101, 49; 604/54, 46, 77**

[56] References Cited

U.S. PATENT DOCUMENTS

4,702,734 10/1987 Terranova 604/54

FOREIGN PATENT DOCUMENTS

0312208 4/1989 European Pat. Off. .

Primary Examiner—F. T. Moezie

Attorney, Agent, or Firm—Fish & Richardson

[57] ABSTRACT

A method for promoting bone, periodontium or ligament growth of a mammal comprising applying to the bone periodontium or ligament a growth-promoting amount of a composition comprising a partially purified or purified polypeptide growth factor.

1 Claim, 1 Drawing Sheet