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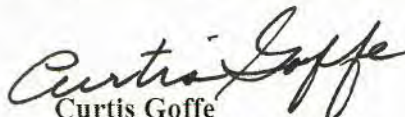
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ISSUE DATE: July 4, 1989

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- [54] **EX VIVO EFFECTOR CELL ACTIVATION FOR TARGET CELL KILLING**
- [75] Inventors: Cyril J. Honsik; Ralph A. Reisfeld, both of La Jolla, Calif.
- [73] Assignee: Scripps Clinic and Research Foundation, La Jolla, Calif.
- [21] Appl. No.: 916,173
- [22] Filed: Oct. 7, 1986
- [51] Int. Cl.⁴ A61K 39/395
- [52] U.S. Cl. 424/85.8; 424/93; 435/240.2; 530/387; 530/828; 530/388; 530/808
- [58] Field of Search 435/2, 4, 7, 29, 948; 935/107, 108; 424/85, 93; 436/512, 519

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Assistant Examiner—Jeff. P. Kushan
Attorney, Agent, or Firm—Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd.

[57] **ABSTRACT**

A method and composition for killing target cells is disclosed. The method utilizes ex vivo IL-2 activation of leucocyte effector cells and arming the activated leucocyte effectors with monoclonal antibodies whose Fc portions bind to the IL-2-activated effectors and whose paratopic portions immunoreact with an epitope expressed on the surfaces of the target cells. The composition contains a cytolytic amount of the armed, IL-2-activated effector cells dispersed in an aqueous physiologically tolerable diluent medium.

20 Claims, 4 Drawing Sheets

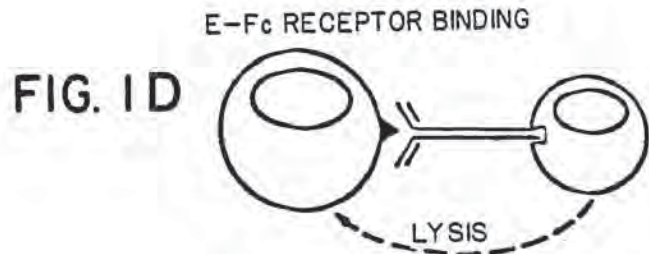
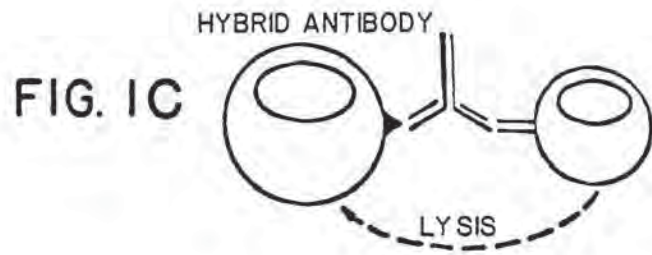
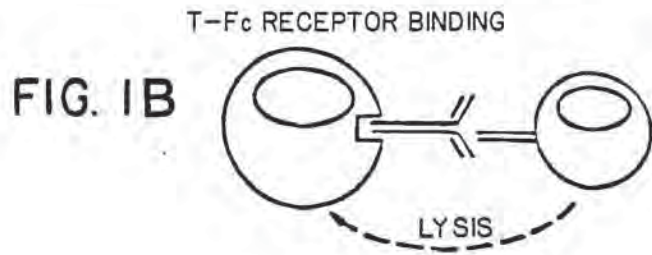
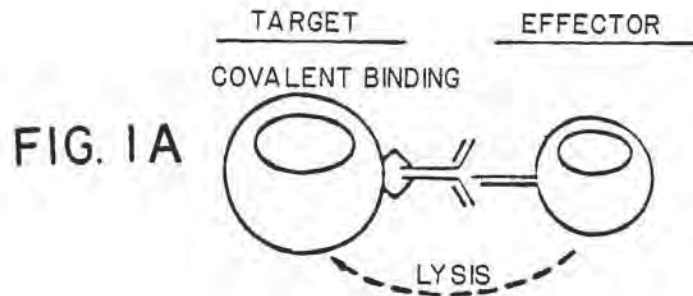


FIG. 2

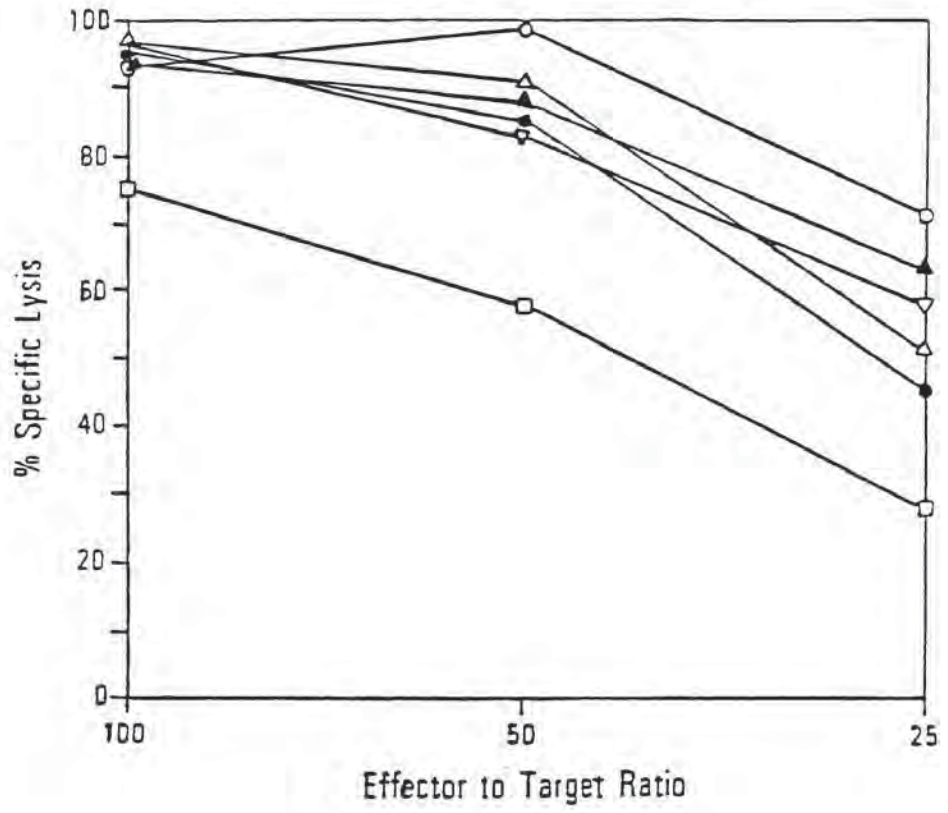
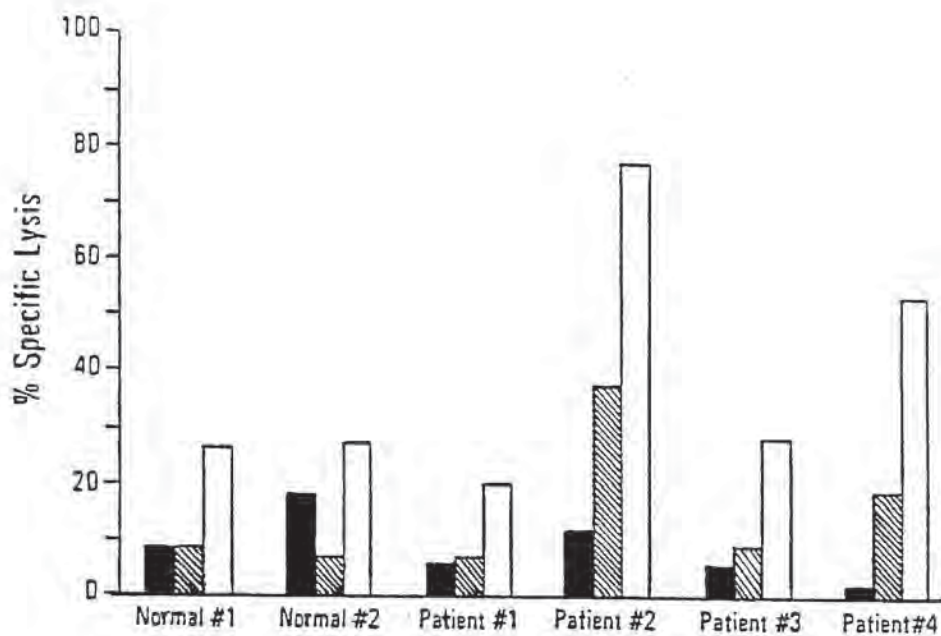


FIG. 3



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