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(12) United States Patent Zamora et al.

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(54) POST LABELING STABILIZATION OF RADIOLABELED PROTEINS AND PEPTIDES (75) Inventors: Paul O. Zamora, Guadalajara (MX); Michael J. Marek, Albuquerque, NM (73) Assignee: RhoMed Incorporated, Princeton, NJ (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. (21) Appl. No.: 09/393,581 (22) Filed: Sep. 9, 1999 Related U.S. Application Data Continuation of application No. 08/794,311, filed on Feb. 3, 1997, now Pat. No. 6,066,309, which is a continuation-in-part of application No. 08/794,270, filed on Jan. 31, 1997, now abandoned. Provisional application No. 60/011,027, filed on Feb. 2, (51) Int. Cl.⁷ A61K 51/00; A61M 36/14 (52) U.S. Cl. 424/1.49; 424/1.11; 424/1.69; 424/1.53; 424/806; 530/863 424/1.49, 1.53, 1.65, 1.69, 9.1, 179.1, 806, 807, 804, 805; 530/300, 311, 317, 333, 334, 338, 863, 864, 350, 866, 861, 862; 206/223, 569, 570; 549/315; 436/129

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Primary Examiner—Dameron L. Jones (74) Attorney, Agent, or Firm—Darby & Darby

(57) ABSTRACT

The subject invention relates to the use of ascorbic acid and derivatives thereof in stabilizing radiolabeled proteins and peptides against oxidation loss of radiolabel and autoradiolysis. Ascorbic acid is added after radiolabeling, including any required incubation period, but prior to patient administration.

12 Claims, 13 Drawing Sheets



FIG. 1A

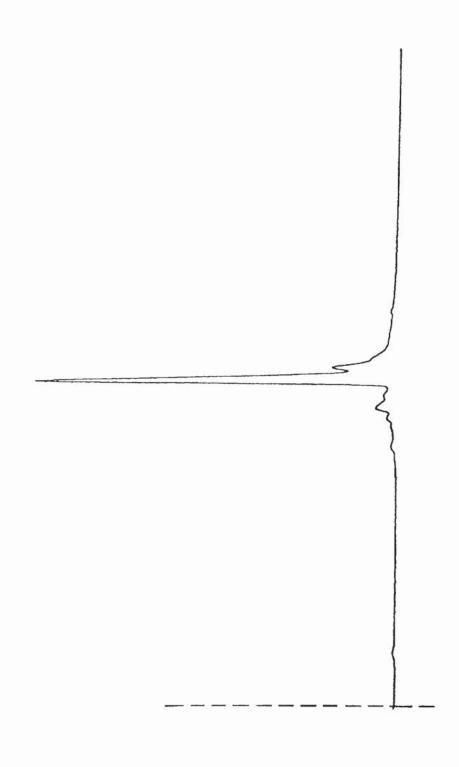
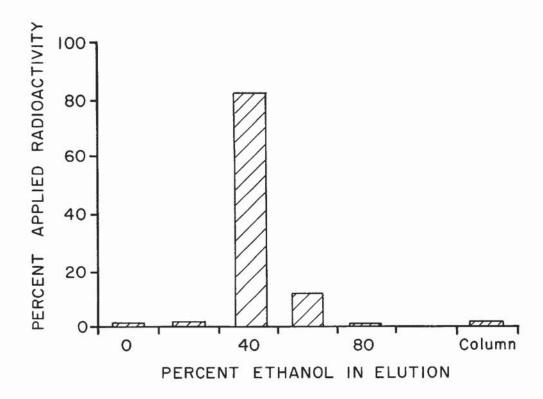


FIG. 1B





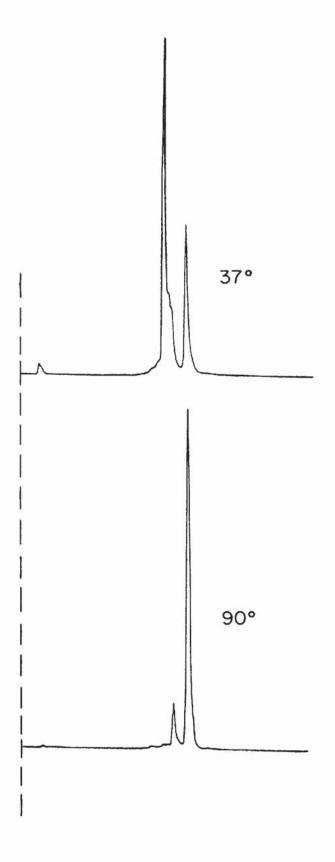
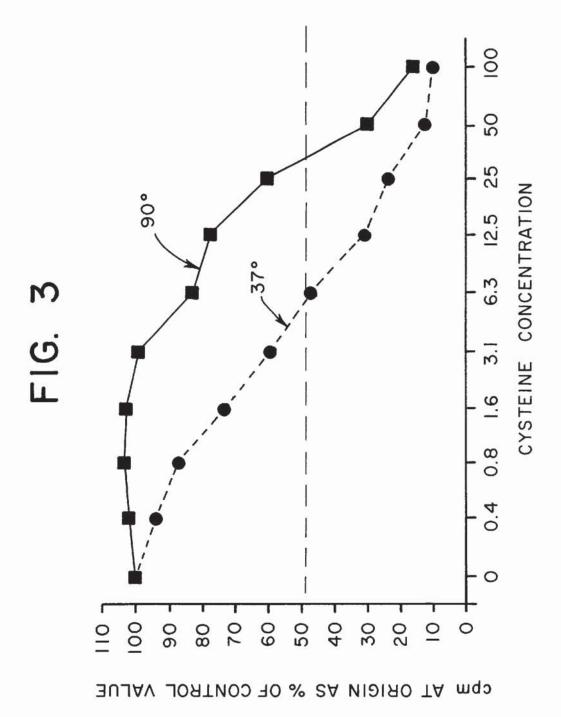


FIG. 2A

FIG. 2B



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