The Director

of the United States Patent and Trademark Office has received
an application for a patent for a new and useful invention. The title
and description of the invention are enclosed. The requirements
of law have been complied with, and it has been determined that
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Patent

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Director of the United States Patent and Trademark Office
United States Patent
Armbruster et al.

MEANS AND METHODS OF MEASURING PARATHYROID HORMONE IN PATIENTS SUFFERING FROM OXIDATIVE STRESS

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Reference Cited
U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS
WO WO 02/082092 A2 10/2002
WO WO 03/003986 A2 1/2003

OTHER PUBLICATIONS
Logue et al., J. Immunological methods, 1991. 137, 159-166."

* cited by examiner

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ABSTRACT
A method is disclosed for obtaining an antibody or antibody fragment to a conformational epitope specific for misfolded inactive human parathyroid hormone and fragments thereof. The method includes the steps of a) immunizing an animal with an immunoconjugate which comprises oxidized parathyroid hormone or an oxidized fragment of parathyroid hormone, or both; and b) recovering an antibody, antibody fragments, or single chain antibody. The complementary determining region of the recovered antibody, antibody fragment or single chain antibody is capable of specifically recognizing a conformational epitope (antigenic determinant) which is present on oxidized parathyroid hormone and fragments thereof only but not regular bioactive human parathyroid hormone.

9 Claims, 11 Drawing Sheets
Specification includes a Sequence Listing.