The International Intellectual Property Organization (19)

International Publication Date: 24 July 2008 (24.07.2008)

International Publication Number: WO 2008/089440 A3

International Patent Classification:
- AOIK 67/00 (2006.01)
- AOIK 67/027 (2006.01)
- AOIK 67/033 (2006.01)
- C12N 15/00 (2006.01)


Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Applicant: UNIVERSITY OF UTAH RESEARCH FOUNDATION [US/US]; 615 Arapeen Drive, Suite 310, Salt Lake City, UT 84108 (US).

Inventors: and

Inventors/Applicants (for US only): BENJAMIN, Ivor, J. [US/US]; 1504 Federal Heights Drive, Salt Lake City, UT 84103 (US); RAJASEKARAN, Namakkal, S. [IN/US]; #1210, University Village East, Salt Lake City, UT 84108 (US); KENNEDY, Thomas, P. [US/US]; 1619 Bardstown Road, Charlotte, NC 28226 (US).

Agents: GILES, Brian, P et al; Needle & Rosenberg, PC, Suite 1000, 999 Peachtree Street, Atlanta, GA 30309-3915 (US).

Published:
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

Date of publication of the international search report: 16 October 2008

Title: COMPOSITIONS AND METHODS FOR DETECTING, TREATING, OR PREVENTING REDUCTIVE STRESS

Abstract: Disclosed herein is a non-human animal model of protein aggregation cardiomyopathy. Also disclosed are compositions and methods of treating or preventing a condition in a subject caused or exacerbated by reductive stress. Also disclosed are compositions and methods of predicting, detecting, or monitoring reductive stress in a subject.
### INTERNATIONAL SEARCH REPORT

**International application No**: PCT/US08/51488

**A  CLASSIFICATION OF SUBJECT MATTER**

<table>
<thead>
<tr>
<th>IPC</th>
<th>AO1K 67/00( 2006 01),67/03( 2006 01),67/027( 2006 01),C12N 15/00( 2006 01)</th>
</tr>
</thead>
</table>

**USPC**: 8008-1 8.21

According to International Patent Classification (IPC) or to both national classification and IPC

### B  FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

- U S 8008-18, 2.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

medline biosis caplus east

### C  DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
</tr>
</thead>
</table>
| X        | SANBE et al. Desmin-related cardiomyopathy in transgenic mice a cardiac amyloidosis  
PNAS, 06 July 2004, Vol 101, No 27, pages 10132-10136  See entire article | 1-19                 |

- **Special categories of cited documents**
  - "A" document defining the general state of the art which is not considered to be of particular relevance
  - "E" earlier application or patent published on or after the international filing date
  - "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  - "O" document referring to an oral disclosure, use, exhibition or other means
  - "P" document published prior to the international filing date but later than the priority date claimed
  - "I" later document published after the international filing date or priority date and not in conflict with the application but cued to understand the principle or theory underlying the invention
  - "X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
  - "Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
  - "A" document member of the same patent family

**Date of the actual completion of the international search**: 05 June 2008 (05 06 2008)

**Name and mailing address of the ISA/US**

- Mail Stop PCT, Ann ISA/US Commissioner for Patents  
P O Box 1450  
Alexandria, Virginia 22313-1450

**Facsimile No**: (571) 273-3201

**Date of mailing of the international search report**: 13 AUG 2008

**Authorized officer**: Michael C Wilson  
**Telephone No**: 571-272-0507

Form PCT/ISA/210 (second sheet) (April 2007)