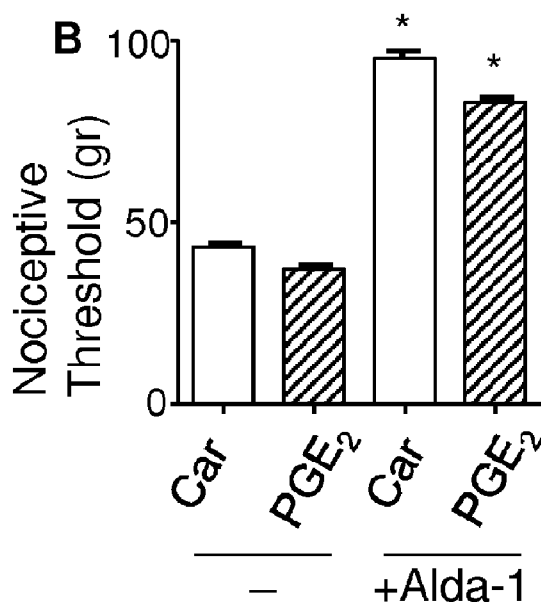




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[Continued on next page]

- (54) Title: METHODS AND COMPOSITIONS FOR TREATING PAIN



- (57) Abstract: Methods and compositions are provided for treating pain in an individual. Aspects of the methods include administering to the individual an agent that promotes ALDH activity. These methods find many uses, for example in treating and preventing nociceptive pain, inflammatory pain, and neuropathic pain.



Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US13/56432

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of a sequence listing filed or furnished:

a. (means)

☐

on paper

☒

in electronic form

b. (time)

☐

in the international application as filed

☐

together with the international application in electronic form

☒

subsequently to this Authority for the purposes of search

2. ☒ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US13/56432

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12N 9/04 (2013.01)

USPC - 435/190, 183, 189; 514/18.3, 17.7, 1.1, 1

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)

IPC(8) - C12N 9/04 (2013.01)

USPC - 435/190, 183, 189; 514/18.3, 17.7, 1.1, 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)

MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Google Scholar; Google Patents; PubMed; ProQuest; treat*, administer*, pain, agent, promot*, 'Aldehyde dehydrogenase,' 'ALDH,' 'Alda-1'

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/0113423 A1(MOCHLY-ROSEN, D et al.) May 6, 2010; abstract; figure 1; paragraphs [0043]-[0045], [0082], [0083], [0086], [0088], [0496], [0497]	1-4, 6-12, 14, 15
---		5, 13
Y	US 2010/0098713 A1 (MEYERS, RE et al.) April 22, 2010; paragraphs [0411], [0662]	5, 13

☐ Further documents are listed in the continuation of Box C.

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"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

"T" later document published after the international filing date or priority date and not in conflict with the application but cited 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

"&" document member of the same patent family

Date of the actual completion of the international search

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Date of mailing of the international search report

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